Clinical Lecture
ON
STERILITY.

Delivered at St. Bartholomew's Hospital,

BY J. MATTHEWS DUNCAN, M.D.

GENTLEMEN,—This subject occasionally comes before us in "Martha" ward, chiefly in connexion with spasmodic dysmenorrhœa. It will often come before you in practice, for few passions are stronger than the desire for children. The subject has many branches which I shall not enter on at all, or shall merely allude to, confining my remarks chiefly to absolute sterility—failure to conceive even once in women apparently healthy and well formed.

Besides failure to conceive even once under ordinary circumstances, we have many conditions that are well ascertained to be closely allied to this absolute sterility. Among these are morbid pregnancy, abortion, miscarriage, plural pregnancy, excessive family, unhealthy children, and relative sterility, including that of women who bear only one child, and that of women who prematurely cease to bear children. All of these subjects are well worthy of your study in works on sterility, for they are pathologically interesting, and they are valuable as increasing that intelligence without which you cannot be wise guides of your clients.

For syphilis you require two parties—one who gives the poison, and one who receives it; but the disease is the same in each: the poison produced by the second party is a reproduction of the poison got from the first, and so propagation goes on. In child-bearing two parties are implicated also. One gives, and the other receives. The process, however, cannot be reversed, as in syphilis, where either may be giver and either receiver. The two combine to complete one process, culminating in the production of a living healthy child. The giver of syphilis is a matter of little importance in the case of the receiver. Not so in the production of pregnancy and of a healthy fœtus.

In lecturing here, then, on sterility of women, I am embarrassed by dealing mainly with only one half of the matter, probably the chief or predominant half. I still say probably the chief or predominant half, but enlarged experience and inquiry make me more and more convinced of the greatness of the part played by the male, and that not only in absolute sterility, but in the other allied forms. In absolute sterility, indeed, one of the greatest factors is orchitis or epididymitis in the male. It is a good rule to subject a woman to no prolonged, painful, or dangerous treatment for sterility, unless assured of the potency of the male as regards connexion and as regards the semen. A woman may be treated directly for spasmodic dysmenorrhœa, and such treatment is indirectly treatment for sterility. But, beyond this, it is not uncommon to have treatment of very doubtful value, prolonged, painful, and not rarely fatal, proposed or carried on. Now, before even considering any such, it is desirable to have the male examined; and in my practice I have found that in at least a half of such women, sterile after treatment for spasmodic dysmenorrhœa, the male is at fault. The examination of the male I commit to a surgeon; and I may here express my regret that I can give no precise numerical data. The report sent me in such circumstances is most frequently that there is azoospermia and a history of gonorrhœa and inflamed testicle some years previously. Sometimes the report is of morbid sperm, rare spermatozoa, dead spermatozoa, sperm containing pus or blood globules or otherwise unhealthy. Rarely there is want of potency and want of sexual desire; and I may here remark that want of potency in young men, accompanied with want of desire, is a far more important matter than the not rare analogous conditions in the female. Such conditions in the male may amount to complete impotence and consequent sterility, while in the female the analogous conditions (absence of desire and pleasure) are not rarely conjoined with successful pregnancy. In one case of this kind, in a male, in good health, simple and veracious, the rare connexions were only occasionally accompanied by emission, and the semen which the surgeon examined was sometimes healthy, sometimes azoospermic. This man had not had connexion with any other than his wife, and he declared he had used no kind of solitary indulgence.

You are not to suppose that inquiry and examination the most searching ever justifies you in declaring the man to be "all right"; and the same is true of the woman. You can only, in either case, get the length of saying that you can find nothing wrong; and this medical limitation on the part of the practitioner is not confined to this special subject. You cannot say that a man's heart is all right, however carefully and skilfully you examine it; you can only say that you can find nothing wrong, no indication of disease. A man or a woman may be absolutely sterile in whose anatomical and physiological condition you can find no flaw whatever.

This sterility in both man and woman, who are both, at the same time, sexually healthy and complete, is proved and illustrated by the mysterious limited sterility of some lower animals as well as man. A woman may be sterile with this man and fecund with another; while the same man, fecund with another, is sterile with this woman. Neither party is absolutely sterile, for both can prove their fecundity; the sterility is limited to the conjunction of the individuals. Observations of this kind are made in some cases of men or women who are more than once married, and it has been called incompatibility.

Less is known of the sterility of men than of women, but recently good use has been made of the statistics of Buda-Pesth to advance the subject, and I shall only say that Körösi's results show that the fertility or sterility of men is regulated much as that of women has been shown to be as regards the influence of age, especially as tested by the survival of children.

Sterile marriage is, as I have said, frequently the consequence of gonorrhœa with orchitis and epididymitis, producing azoospermia. In the female there is frequently gonorrhœa with salpingitis and ovaritis, but no connexion has been established between these diseases and sterility in her. We have no reason to believe that gonorrhœa damages the spermatozoa in man or the primordial cell in woman as syphilis does, and it is natural to explain the difference between man and woman mechanically. In the former, the duct or ducts get closed against the passage of spermatozoa; while in the woman there is no such closure. Yet it is not to be forgotten that in woman extraordinary cases occur in which inflammation and its results, whether originated by gonorrhœa or not, destroy the machinery of impregnation, and in some such cases a mechanical theory of sterility in her as in man is tenable. Women whose ovaries have been acutely inflamed or are chronically inflamed, or are the subject of indolent enlargement, are not necessarily sterile.

The most generally recognised cause of sterility is spasmodic dysmenorrhœa, and students are familiar with the combination, dysmenorrhœa and sterility. The conjunction has not been quite proved, the difficulties in the way of absolute proof being very great. You may adopt the theory because it is undisputed, because it has long survived, and because cures of sterility, those that can best bear scrutiny and cross-examination, are not rare, and are properly cures of spasmodic dysmenorrhœa, fecundation following the successful (sometimes, too, the unsuccessful) treatment of the dysmenorrhœa. This form of dysmenorrhœa is generally congenital, aggravated by marriage, and cured by pregnancy, whether following treatment of dysmenorrhœa or not; for it is not rare for impregnation to occur in bad cases, and where no treatment has been resorted to. On the theory and treatment of spasmodic dysmenorrhœa you will have a special lecture; they do not come before us to-day.

While dysmenorrhœa is the most generally recognised cause of sterility in women, there is no doubt that age is the most important factor or cause, though it is scarcely recognised at all, and this is true probably of men as well as of women. You cannot fix on a special age and prove its potency as in dysmenorrhœa. You cannot cure age as you can dysmenorrhœa, and watch the result. But you might think that, in the case of the young, time would cure; and

here you find one of the evidences of the mysterious influence or power of age. In ordinary circumstances a woman is not sterile, of course, till she is married. Then she may prove to be sterile; and you might naturally suppose that if prematurity made her sterile the inevitable progress towards the age of maturity and on to senescence would bring cure; but it does not. The prematurely married woman is liable to remain persistently sterile. It is by statistics that all this is demonstrated, and these statistics you must study if you are to go to the bottom of this important matter. In women the age of maturity is twenty to twenty-five; in men it is later, probably by at least five years; and you will pardon the interpolation here of the reflection, well worthy of being fully dwelt on, that this late ascertained physiological law tallies with the old and wisest counsels as to the nubility of men and women—a part of the grand subject of morals and medicine. At this age woman has the lowest risk of sterility, the greatest likelihood of having healthy children that will long survive, the greatest likelihood of herself surviving childbirth, the lowest risk of having abortions, of having excessive family, of having plural pregnancy, and of bringing forth idiots.

You may naturally ask—What have abortions, early death, excessive families, twins, triplets, and idiots to do with sterility? Now it has been shown that all these have affinity with sterility, following the same law of age as sterility. All these conditions are disastrous, are imperfections in fecundity, and they culminate in the greatest imperfection of fecundity—absolute sterility. Fecundity does its best in the production of healthy long-lived offspring. Absolute sterility is the complete failure of fecundity. Between the two—that is, between best success and utter failure—you have the series of imperfections enumerated and others. The best and worst and the intermediate imperfections all obey the great law of age; each, when individually investigated, corroborating it. Moreover, most valuable confirmation is found in natural history—the comparative study of fecundity in plants and animals.

I have said that twenty to twenty-five years is the best nubile age of women. Then there is least sterility, and sterility increases as you leave this age in the direction of growth and prematurity, or of elderliness and post-maturity. But the sterility has a much more rapid fall on the side of youth—that is, down to fifteen or less—than on the side of elderliness—that is, to forty-five or fifty. The figures show this; for twenty to fifteen is a short space compared with twenty-five to forty-five. In man Körösi has established a difference from woman, the fall of fecundity or increase of sterility as age advances being much slower than in woman. And here I can merely mention another subject of practical importance—the power of reducing the injurious influence of premature or post-mature marriages in either sex by conjunction with a person of the other sex at a different age, selected with a view to this end. Of this kind of selection, an example which, according to the present state of our knowledge, has some efficacy is the selection of a young mature woman for an elderly man.

It need scarcely be said that among the causes of sterility is bad health; and of this injurious influence much is known. But our knowledge is based chiefly on experience in the lower animals and in plants; and I feel no need for dwelling on it here. Morbid conditions of the womb and ovaries are of course worthy of attention. It is common to attribute very great importance to so-called ulceration, to minor displacements, and to slight ovarian disorders; but nothing is known positively as to their connexion with sterility. They are, indeed, in this connexion as in others, bugbears for the most part.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—At the fortieth annual meeting of the governors the report, which was adopted, showed the number of cases treated last year to have been: In-patients, 2063, an increase of 157; and out-patients, 12,534, an increase of 893 compared with the preceding year. Among the in-patients are included: 104 cases of fever, erysipelas, measles, and diphtheria treated in the fever block, and 391 children under ten years of age treated in the children's department. The average stay was twenty-one days. 112 patients were sent to various convalescent homes. Several improvements in the arrangement and furnishing of the wards have been carried out during the year.

Clinical Lectures
ON
CASES OF DIFFICULT DIAGNOSIS.

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LECTURE VIII.

TUBERCULAR PERITONITIS IN THE ADULT.

(*Concluded from p. 519.*)

II. CHRONIC TUBERCULAR PERITONITIS.

IT will be necessary for us now to consider the difficulties of diagnosis, and you will find these vary according as the case presents distension without much fluid, or a localised collection of fluid bounded by adhesions.

You may suspect the existence of chronic tubercular peritonitis of this form when a young person complains of persistent pain fixed in some part of the abdomen, aggravated by motion or by the action of the bowels, increased by pressure, and accompanied by marked distension of the abdomen, elevation of temperature, thirst, loss of flesh, and derangement of the digestive process. But sometimes young females suffering from amenorrhœa alone exhibit very similar symptoms, and, as tubercular peritonitis is not unfrequently preceded by cessation of the menstruation, you may experience considerable difficulty in the diagnosis.

In tubercular peritonitis, however, you rarely have any well-marked anæmia to account for the amenorrhœa, and in many cases the lips and cheeks are florid instead of being pale. The pain is usually aggravated by motion, such as walking or driving, is relieved by rest, and is often at first confined to the pelvis. As time goes on, the pain does not remain located in the epigastrium or left side, as is the case in anæmia; but it may shift from place to place, and it is more apt to be aggravated by an action of the bowels than by food. Then, again, the loss of flesh and strength is more rapid, there is usually thirst towards evening, and the temperature, although it may be normal in the morning, usually begins to rise in the afternoon. The abdomen may be swollen in both disorders, but it is more tense in tubercular peritonitis, and the pain is more increased by deep than by superficial pressure; whilst you may discover by palpation the existence of fluid or a tumour, or some morbid change in the pelvic organs. Cough, expectoration, and night sweats point to the tubercular affection, and in many cases you may find the physical signs of pleurisy or perhaps a little comparative dulness with crepitation at the apex.

The mistakes that have been made by so many eminent practitioners between this form of peritonitis and ovarian tumours are a sufficient proof of the difficulty of the diagnosis; indeed, in many cases an exploratory opening is the only means by which we can arrive at a certain conclusion. You may, however, suspect that an elastic abdominal tumour, dull on percussion, will be of this nature if you have a history of previous pain, distension, and tenderness of the abdomen, accompanied by febrile symptoms, and if the tumour has occupied the same position from the first. Your opinion would be strengthened if the swelling were painful and tender, if its boundaries were irregular, if there was an elevation of temperature and rapid loss of flesh and strength, or if you could discover another solid or elastic tumour in a region not usually occupied by an enlarged ovary. Of course you would carefully explore the chest, and any indications of tubercle in the lungs or of pleurisy would throw considerable weight into the scale in favour of tubercular peritonitis.

But another question will naturally suggest itself to you. Supposing that a case is clearly made out to be one of chronic general peritonitis, is it necessarily of tubercular origin? It used to be held by some pathologists that all cases of chronic peritonitis were of this nature; but this is clearly incorrect. Excluding cases of local peritonitis, we have twenty-three cases of chronic peritonitis recorded in our books in which no tubercle was discovered, during the

same period in which the forty-seven cases of tubercular peritonitis are registered. The non-tubercular cases are therefore nearly half as common in adult life as those which owe their origin to tubercular disease.

Of the above non-tubercular cases, seven were associated with cirrhosis of the liver, and in all there was an enlarged spleen and ascites, whilst in four there was also exudation into the pleura. In five there was chronic disease of the kidneys, accompanied by enlarged heart in three, in four associated with thickened capsule of the liver, and in two with effusion into or thickening of the pleura. In only two instances did the chronic peritonitis seem to have originated from local causes, and in two others there was disease of the heart; but in each the capsule of the liver was greatly thickened. Amongst the females, abscesses in the pelvis seemed chiefly to have set up the inflammatory process, five of the cases being associated with this condition.

We have therefore three conditions which seem to be the chief causes of chronic non-tubercular peritonitis—viz., cirrhosis of the liver, chronic diseases of the kidneys, and pelvic abscesses, and if you can exclude these you will be justified in looking upon any well-marked case of chronic general peritonitis as of tubercular origin. It is further worthy of special notice that tubercular disease of the lungs was absent in all these non-tubercular cases, except in one, in which the peritonitis seemed to have originated from a local cause. On the other hand, many of them were associated with effusion into the pleura, and it will be well to remember this fact, as some practitioners have spoken of the occurrence of pleurisy as of the highest value in the diagnosis of tubercular peritonitis. The above figures, however, show how it often occurs in non-tubercular cases, and I have myself been led into errors of diagnosis by trusting too much to this condition in cases of chronic inflammation of the peritoneum.

As regards treatment, you must bear in mind that you have to deal not merely with an attack of peritonitis, but that the inflammation is the result of a bacterial infection, and that therefore whatever tends to depress the vital powers of the patient must be avoided.

When you have the opportunity, choose a climate likely to invigorate the patient, and, if the season of the year be favourable, select a residence near the sea. Whenever the pain becomes severe or there is much elevation of temperature, insist upon the recumbent position, but if the patient is not suffering much pain a limited amount of exercise in the open air is to be recommended. The diet should be digestible and nutritious. Stimulants are rarely necessary excepting in the later stages of the disease. During the attacks of fever you had better restrict the patient to food composed of milk, farinaceous substances, and animal broths; but when improvement takes place, chicken, fish, or pounded meat may be substituted, and, if he is capable of digesting it, cod-liver oil may be given.

As regards medicines, the main indications for treatment are to relieve pain and improve the general health. When there is much pain and fever, I generally prefer the compound ipecacuanha powder to any other form of sedative, but if this does not afford relief you may prescribe opium in any other form. Hot fomentations, poultices, and in the more chronic cases small blisters or the external application of iodine, are of value; but I rarely order leeches, as the amount of relief obtained by their use is more than compensated for by the loss of strength that follows their application. When the attacks are subsiding, cinchona, quinine, or some mineral acid is often valuable, but I have rarely found benefit from the use of iron.

I think there is no doubt that any collection of fluid that does not seem likely to be absorbed should be evacuated. Most of the operations hitherto recorded have been followed by a sharp attack of peritonitis, but this has usually subsided and the patients have recovered. But you will naturally say—If the operation has succeeded in some, why may not this method of treatment be adopted in all cases of chronic tubercular peritonitis of the adhesive form? I think our present experience is not enough to justify us in coming to a conclusion on the point, especially when we remember that so many recover, at any rate for a time, under medical treatment. If future experience, however, should show that the operation has not only a beneficial effect on the peritoneum, but tends also to prevent the extension of the bacterial elements to the lungs and other organs, then there is no doubt surgical treatment should be employed in all cases of the disease.

(*b*) *The Ascitic form of Chronic Tubercular Peritonitis.*

The fluid that is at first effused in chronic tubercular peritonitis is gradually absorbed, excepting where it remains enclosed by adhesions; but you will remember that, when speaking of the morbid anatomy of the disease, it was mentioned that occasionally a large quantity of serum remained in the abdominal cavity. These ascitic cases were found to be connected either with great thickening of the peritoneum or with cirrhosis of the liver, and as the clinical history of these two forms greatly differs, it will be necessary to consider them separately.

The following case extracted from our records is a good illustration of the first of these conditions.

CASE 7.—A woman, aged forty-two, was admitted into the hospital on account of ascites. Two years previously she had begun to lose flesh, and six months before her admission she first observed swelling of the abdomen and loss of appetite. These were followed by pain of the abdomen, which had greatly increased five weeks before she applied at the hospital. On admission she was found to be greatly wasted. The abdomen projected like that of a person advanced in pregnancy. It was distended two or three inches above the lower border of the sternum, but was more prominent on the right than the left side. The front of the abdomen was everywhere dull on percussion, but the left loin behind was more tympanitic than the opposite one. The urine was of specific gravity 1024, and not albuminous. The apex of the right lung was somewhat dull on percussion; the inspiration was harsh and the expiration prolonged. The patient was tapped next day and 322 ounces of watery fluid were removed. After the tapping, a line running across the abdomen, about one inch broad and one inch above the umbilicus, hard and movable, suggested the idea of the omentum being coiled up into a roll; below this the abdomen felt soft. The fluid rapidly collected after the tapping, and the patient died in about two weeks. At the necropsy a large quantity of fluid was found in the abdomen, and the intestines were collected together in the middle of the abdominal cavity, the coils being consolidated by greatly thickened peritoneum. The small omentum and the peritoneum covering the stomach were converted into a firm, tough, fibroid substance, and there were tubercles scattered over the whole surface of the peritoneum. There was an ulcer near the great curvature of the stomach, but the condition of the lungs is not mentioned.

Cases of this kind are apt to be exceedingly puzzling, and are easily confounded with ascites arising from other causes. When, however, you can obtain a good history, you will generally find, as in the above instance, that the general health had been failing, and that the abdomen had been painful and tender for some time before there was any well-marked swelling, and where the patient has been under your observation you will probably observe a daily rise of temperature towards the evenings. The swelling of the abdomen is often not symmetrical, one part bulging more than another; and the tympanitic note that marks the site of the colon floating in the fluid, which is present in ordinary ascites, is usually wanting in this condition, as the colon is often tied down by adhesions or covered by the thickened peritoneum. One loin, as in the above case, may be unusually tympanitic on account of the intestines being bound down more on one side than the other. You will remark that the thickened peritoneum was discovered in the shape of a tumour after tapping, and in all cases it should be searched for after the evacuation of the fluid. Unfortunately in the case just quoted the condition of the right lung after death is not recorded, although from the nature of the physical signs observed during life there can be little doubt it was diseased. If in a doubtful case a tubercular affection of the lung could be determined, or if the physical signs of pleuritic effusion were found, it would go far to settle the diagnosis in favour of chronic tubercular peritonitis.

The second variety of the ascitic form of tubercular peritonitis is where it is associated with cirrhosis of the liver. You will remember that, when discussing the pathology of the disease, it was mentioned that these two conditions were occasionally met with in the same case, and that in all probability the hepatic affection preceded that of the serous membrane. This seems to be confirmed by the history of the cases recorded in our books, for in each the symptoms of cirrhosis first made their appearance. In two there had been hæmatemesis two or three years before

the commencement of the fatal illness, in another there had been an attack of severe epistaxis, and in all there were well-marked symptoms of declining health previously to the appearance of the ascites.

The cases were all admitted into the hospital on account of ascites, attended by loss of flesh and strength, and no mention is made in any of the records that tubercular peritonitis was suspected. In one instance severe pain of the hypochondrium attracted notice, in another abdominal pain, which was acute enough to induce the patient to lie with his knees raised, whilst in a third symptoms of peritonitis only showed themselves after the abdomen had been tapped. Along with the ascites the veins on the front of the abdomen were enlarged, and in two of the cases a hard tumour was discovered in the umbilical region. The pulse was quickened in all, and in all the temperature rose to 101° or 102° in the evenings, sinking to 99° in the mornings. All of them after death presented tubercular changes in the lungs, although there is no record excepting in one case of physical signs during life indicating this condition.

Let us now ask what are the circumstances that should induce us to suspect a case of ascites arising from cirrhosis of the liver to be connected with tubercular peritonitis. Let me, then, remind you, in the first place, that we before found that this form of the disease was rarely met with excepting between twenty and thirty years of age. If, then, you found a young man affected with ascites following habits of intemperance, who was attacked with severe pain and tenderness of the abdomen, vomiting and constipation, with a rise of temperature and quickness of the pulse, you might suspect this complication. But if there was a well-marked family history of phthisis, or if you discovered the physical signs of phthisis or of pleurisy, your suspicions would be greatly strengthened. If in addition to these you found a movable tumour in the abdomen, and you could exclude cancer, your diagnosis of this form of tubercular peritonitis would be tolerably certain.

As to the difficulties of diagnosis. One of our cases is mentioned as having been diagnosed as suffering from emphysema of the lungs with enlarged liver. This mistake would be unlikely to occur excepting in the very early stages, and the history of intemperance, with perhaps epistaxis or hæmatemesis, the occurrence of ascites before œdema of the legs, the enlargement of the veins of the abdomen, and the physical signs of the chest affection, would enable you to distinguish between these complaints. But when, as in those mentioned in our records, there was a distinct tumour to be felt, it would be most difficult to distinguish such cases from those of cancer of the peritoneum. The chief points on which to ground a diagnosis should be that the tubercular affection occurs chiefly in young men, carcinoma in middle or old age of either sex; the history of intemperance would point to cirrhosis, the elevation of the temperature to tubercular peritonitis, the probabilities of which would be further strengthened by the absence of the cachetic appearance of cancer and the accompaniment of the physical signs of tubercular consolidation of the lung.

There is little to be said about the treatment excepting that tapping should be avoided as long as possible, as it is apt in such cases to set up acute peritonitis, whilst the exhibition of mercury and other remedies that experience proves to be so useful in the ascites arising from cirrhosis should not be allowed.

(c) *Chronic Suppurative Tubercular Peritonitis.*

This form of the disease is much more rarely met with in adults than in children; in fact, I can only find three cases in our books, if we exclude those in which there was also intestinal perforation, which in all probability set up the suppuration. Dr. Bouillaud, who has written an excellent paper on Tuberculosis of the Peritoneum and Pleura in the Adult, quotes four cases from various authors, exclusive of those in which perforation existed. Of these seven cases, three had enlarged tubercular glands in the abdomen; in one there were numerous deep ulcerations of the intestines, which had contracted the calibre of the canal in different places; and in two there were masses of tubercle in the omentum in a state of caseation or suppuration; in the remaining case the state of the abdominal organs is not mentioned. Now we can readily understand that a fragment, however minute, of any of these caseated or suppurating masses bursting into the serous sac will set up the suppurative process, and I believe this is the explanation of cases that up to a certain point present only the ordinary features of chronic peritonitis, but which suddenly change their course and terminate in suppuration. In six of the seven cases inflammation of the pleura or tubercular consolidation of the lungs was discovered after death.

Looking at the histories of these cases, we find there was nothing at first to distinguish them from those of the chronic adhesive form, but that the symptoms became rather suddenly urgent. In most the pain was increased, although in one it is expressly stated that it never was severe; the tenderness was aggravated, the temperature rose to a greater height than before, frequent sweatings occurred, and the pulse became very small and frequent. Excessive and uncontrollable diarrhœa was a symptom that presented itself in most of them before death.

In the diagnosis of suppurative tubercular peritonitis you must bear in mind that in most of the cases there is advanced disease of the lungs or pleura, or enlargement of the mesenteric glands, or ulceration of the intestines. If, therefore, in an ordinary case of chronic tubercular peritonitis occurring in a person who has suffered severely from diarrhœa, or in whom there are well-marked physical signs of disease of the pulmonary organs, you should meet with a sudden aggravation of the abdominal symptoms, attended with increase of fever, a very variable temperature, and frequent sweatings, you would be justified in the diagnosis of suppurative peritonitis.

You will observe that I have insisted upon a history of the symptoms of chronic tubercular peritonitis, for non-tubercular suppurative peritonitis may be suddenly lighted up in a tubercular subject, as you saw a few weeks ago in a case in my wards.

CASE 8.—A boy about fourteen or fifteen years of age had been suddenly attacked with severe abdominal pain and constipation. When admitted into the hospital, he had the usual symptoms of peritonitis; the upper part of the abdomen was tympanitic on percussion, but the hypogastrium was dull, and the dull line moved very slightly, with a change of the patient's position. A catheter was passed, and a little urine removed; but the dulness remained, and the finger passed into the rectum detected a somewhat elastic mass filling up the pelvis behind the bladder. There was no tenderness or fulness over the cæcum, and it was therefore diagnosed that the patent had peritonitis from some unknown cause, that the intestines were matted together in the pelvis, and were closely united by adhesions. The boy said he had enjoyed good health before the sudden attack of pain, but it was discovered after his death that he had some time ago been under medical treatment for enlarged glands of the neck. On post-mortem examination general suppurative peritonitis was discovered, with matting together of the intestines; but the mischief seemed to have been produced by the bursting of a suppurating mesenteric gland into the peritoneum; the glands of the mesentery were found to be generally enlarged, but there was no tubercles scattered over the peritoneum.

When we were discussing the subject of fæcal tumours, it was mentioned that many of these cases were of a tubercular character, but in these suppuration is set up by the tubercular material which is in the walls of the intestines or other neighbouring organs, and the pus is walled in by adhesions, thus forming a local abscess. As these cases were discussed at considerable length, it will be only necessary to refer to them on the present occasion.

THE GRAPHOPHONE IN MEDICINE: A NEW ADDITION TO MEDICAL ART IN DIAGNOSIS.

BY BENJAMIN WARD RICHARDSON, M.D., F.R.S.

WHILST observing the graphophone in action three weeks ago, it occurred to me that it might be possible to turn it to some account in medical art and practice. I therefore, through the kindness of Messrs. Glover, obtained the loan of an instrument, with which I have been able to experiment, and to secure some new, and, I think, useful results.

Pulse-reading by the Graphophone.—I commenced the inquiry with the pulse, in order to ascertain if a reading of the pulse could be taken and permanently recorded on the wax cylinder from the sounds produced by pulse movements

through the sphygmophone. In the sphygmophone, as I originally constructed it, the needle marks out the pulse curves over a plate of carbon or of metal inserted in the circuit of Professor Hughes's microphone. I mount on a slip of talc, glass, wood, or ebonite a plate of metal or of gas carbon, and place it as if about to take a tracing of the pulse by the sphygmograph. Then I connect one terminal from a battery of one or two cells to the metal or carbon plate and the second terminal from the battery to one terminal of a telephone. Lastly, I connect the other terminal of the telephone with the metal rod of the support which carries the needle that is moved by the pulse. When the needle, under the pulse movements, makes its tracing on the carbon or metal plate, it completes the connexion between the telephone and the battery, and in the act causes a distinct series of sounds to be produced by the telephone, which sounds are in accord with the movements of the pulse. The sounds heard are three in number: one long and two short, corresponding to the systolic push, the arterial recoil, and the valvular check or chuck.

Of late, in using the sphygmophone, I have discarded the microphone, having found a mode of working with sufficient clearness, for clinical purposes, by letting the needle simply traverse a resonant surface of parchment stretched across a ring of light metal; but this yielded too feeble a sound for the present experiment. The battery was therefore again resorted to, with the microphone, as in the first adaptation, and the battery power was so increased that the sounds emitted through the telephone from the pulse movements were as loud as the human voice in ordinary conversation. The pulse was in this way made to record its action through the mouth of the telephone to the mouthpiece of the graphophone, so as to write its record on the revolving wax cylinder, and the record written, the graphophone was made to give it back in sounds, which came out in the most distinct manner. The three pulse sounds were as clear, when there was perfect stillness, as they were from the sphygmophone direct, and the record remained in such permanency that many hundred repetitions of it could be secured and repeated in any part of the world at the will of the possessor of the cylinder on which it was traced, if the graphophone were at command to develop it. On Saturday night last at least a hundred persons heard the tracing of one pulse quite distinctly.

In the manner described I have now taken impressions on the wax cylinder of several varieties of pulse: intermitttent, irregular, full, quick, slow; and the respective qualities of each are easily heard. To the process only one serious objection can be taken—namely, that with the pulse beat there is an accompanying buzz or murmur which is produced by the instrument, and which somewhat troubles the listener. This complication will, it is expected, be overcome in the course of improvements in construction.

Cough Reading by the Graphophone.—From recording the pulse on the wax cylinder of the graphophone, I moved to the recording of coughs and coughing sounds upon it. In this case the results were exceedingly definite and practical. The cough has simply to be taken as the speaking and singing voice is taken and the return cough by the graphophone is as clearly distinct as the original. On one cylinder I took four varieties of coughs—namely, a loose bronchial, an asthmatic spasmodic, a dry bronchial, and a barking and hacking cough. In listening to these coughs it is difficult to divest the mind of the belief that it is not the patient, actually, who is producing the effect by his own present efforts.

Cui bono?—To what service the facts related above may in course of time be applied it is difficult to say, for this is the first word on the subject, the mere mite in science, which, like the mite in charity, has to be taken rather for the worth of the intention than for any immediate or real practical application. Out of a roll of paper, accidentally used by Laennec, the stethoscope was elaborated, and a new mode of diagnosis, widest perhaps of any, was brought into existence, a truth which proclaims that out of the simplest of simple things the greatest may arise. It may be so here.

In regard to the pulse, it may fairly be said that when a sphygmographic tracing, readable by the eye, can be fixed on paper and sent by post anywhere, it is needless to fix a similar record on a wax cylinder in order that it may be placed in another instrument to be received by the ear. Still, as I have shown elsewhere, there are some special advantages in the sphygmophone which have yet to be appreciated, and which the plan I have described makes permanent. Therefore I would not throw away what little has been gained respecting the pulse because it is little.

On the matter of the cough record much may at once be said in its favour. To be able to compare a cough of to-day with a cough of a month or a year ago would be a good clinical observation, and may be so immediately available in the consulting-room that I have determined to bring it into practice in mine. For lecture purposes also this part of the work would be most useful, since every class of cough could be taught to the student by direct practice and demonstration.

Finally, the different kinds of cries indicative of different sensibilities to pain can be rendered diagnostically. In a word, any sound whatever indicative of health or disease, and any animal motion of health or disease that admits of being translated into sound, can now be recorded, made permanent, and reproduced any number of times, either for comparison, demonstration, or observation. The utilisation of such a power in medicine, once gained, cannot, I think, be lost, and I am happy in having the opportunity of first unfolding it in the columns of THE LANCET.

Manchester-square, W.

TOTAL STAPHYLOMA OF THE CORNEA CORRECTED BY AN OPERATION.[1]

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WHEN asked by the President of the Glasgow Medico-Chirurgical Society, some time ago, to make some remarks on a paper which had been read on an operation for staphyloma of the periphery of the cornea and limbus, I said that the only remark I could offer was that I hoped the author would not repeat the operation. I explained at the time that I regarded it as an established principle that the ciliary region is a dangerous one for the surgeon to operate on. So strongly do I hold this opinion that I am in the habit of laying it down as a rule that, in cases of cuts or tears of the cornea and sclerotic causing an escape of the vitreous, the conjunctiva covering the sclerotic should be brought together by sutures, but the limbus left alone, thus giving nature an opportunity of healing the wound gently by contraction and cicatrisation. A ligature in that region might strangulate the ciliary nerves, and thus prove fatal both to the injured eye and also by sympathy to its fellow, as in cases of traumatic tetanus. I was reminded of this incident the other day, when I read in the *Annales d'Oculistique* a paper written by one of the leading ophthalmologists in Belgium.[2] The case described was that of a boy aged five years, who lost the sight of his right eye by an attack of conjunctivitis, which was thought to be of a diphtheritic character. The eye became distended by a staphyloma of the cornea; the left eye was perfectly healthy. The staphyloma was excised with all the usual antiseptic precautions, not omitting the sterilisation of the instruments; and yet on the third day photophobia commenced in the other eye, which ultimately became blind, notwithstanding the subsequent but, as it proved, too long delayed enucleation of the staphylomatous stump. The author concludes the history of the case with the following words in capital letters: "Such are the facts with their brutal eloquence."

With regard to the pathology of sympathetic ophthalmia, I shall only remark, in passing, that I consider the ciliary nerves to be the primary, if not the only cause. As to the theory of infection by the migration of microbes along the sheath of the optic nerve of one eye to that of the other, I appeal to Professor Sattler, who, in my opinion, is the highest authority on that subject. He thinks that the microbes found in an eye suffering from sympathia are not the staphylococcus pyogenes aureus of Deutschmann, but a special microbe, the nature of which he has not yet determined. Perhaps it may turn out to be the pigment of the choroid altered by disease. Regarding these microbes, therefore, as so many entities and quiddities, I shall

[1] Read before the Glasgow Medico-Chirurgical Society.
[2] Ophthalmie Sympathique après Excision d'un Staphyloma Cornéen par Dr. Van den Burgh. Bruxelles, Oct 1888

adhere to my own doctrine, which is based upon clinical experience. It gives sufficient reason for my objection to surgical interference with a partial staphyloma which involves the border of the cornea and sclerotic. If the eye be troublesome, or if it disfigure the face, enucleation is the only safe remedy. The case, however, is quite different when the staphyloma is situated at the anterior pole of the eye and the distension has taken place at the expense of the cornea alone. In such a case, I correct the deformity and relieve the pain without sacrificing the eyeball.

John H——, miner, aged thirty-five, while working in the pit thirteen months ago, received a blow with a stone on the right eye. Three days after the injury the sight was gone, and the pain, which was slight at first, became excessive. Poultices, fomentations, and other remedies were applied, but without relief. For seven months, during which he was off work, he spent sleepless nights. He was admitted into the Ophthalmic Institution on Oct. 14th. The eyeball was distended at the expense of the cornea, which was opaque, soft-looking, and denuded of

FIG. 1.

Showing the size of the staphyloma; the black shows half of the corneal flap removed.

its anterior elastic layers. The distension was as big as a large bean and pear-shaped, the point looking forwards. The ciliary region was also distended and out of shape, and the globe was visible when the eyelids were closed. The whole eyeball was highly injected, and tender to the touch. After several applications to alleviate the pain, I operated on the eye on Nov. 1st. The patient was put under chloroform by Dr. Macgregor Robertson, who also separated the eyelids, instead of using a speculum. An oval-shaped flap was removed from the centre of the cornea. (Fig. 1.) The lens, which was hard and of a yellow colour, now presented itself, and was removed, its removal being followed

FIG. 2.

Showing the appearance of the eye four months after the operation.

by a small escape of vitreous. The edges of the wound were brought together by a fine needle and silk thread, and adhesive court-plaster and bandage applied to the eyelid. On the third day the eye was opened and the ligatures removed. The edges of the wound were closely applied, and the eyeball had its natural size and shape. On the eighth day the patient was dismissed cured. Up to the present date, after the lapse of nearly four months, when the patient was shown to the Society, there has been no return of pain, and the eyeball looks as well as we could desire (Fig 2). With a little tinting, it might have almost the same appearance as the other eye.

Glasgow.

DARENTH ASYLUM.—On March 13th Mrs. Dyer, the much beloved and respected matron of Darenth Asylum, was presented with a very handsome travelling trunk and literary machine by her nurses, and a beautiful little work-basket by the patients. Mrs. Dyer has been an officer of the Metropolitan Asylums Board for thirteen years, and her retirement (owing to ill health) is universally regretted.

AN ACCOUNT OF

THREE CASES OF FRIEDREICH'S DISEASE, OR HEREDITARY ATAXIA.

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THE father of these patients, a butcher, suffered from heart disease and dropsy, and died in an asylum, apparently of melancholia. His parents died of old age, his father living to be ninety-six; one of his sisters committed suicide; family healthy. The mother is still living. Her father's father died at the age of ninety-nine, and her mother at the age of a hundred and one. Her father lost all his hair before he was thirty years old, and died of diabetes; her mother died at the climacteric period. There were two other sons and another daughter, all of whom survive. They had fourteen children—(1) Georgina, aged thirty-seven, healthy; (2) Albert, aged thirty-five (one of the patients); (3) George (drowned); (4) Isaac (died of croup); (5) a son, aged twenty-five (examined and found healthy); (6) William, and (7) Mary Ann (both died, at the age of five months, of "weakness"); (8) Lizzie, aged twenty-one (examined and found healthy); (9) a daughter (died at the age of one month, overlaid); (10) Caroline, aged eighteen (one of the patients); (11) Isaac (died, at the age of three years, of croup); (12) John, aged fourteen (examined and found healthy); (13) Isaac, aged eleven (one of the patients); (14) a child prematurely born at seven months (died in three days). The father was a heavy drinker; no evidence of syphilis could be obtained. The mother is a strong, healthy woman, and does hard work. Has never suffered from fits, from any nervous affection, or any severe illness. She was carefully examined as to state of reflexes &c., and found to be normal in every respect.

CASE 1.—The first patient, Albert A——, aged thirty-five, is a pale, pasty-faced man, fairly well nourished. He has lost the greater part of his hair. He never had any severe illness; has had gonorrhœa, but not syphilis. He never had fits, or any loss of consciousness. He is said, when aged five years, to have looked "silly"—that is, he could not stand still, rocked to and fro when standing, and kept his mouth open; he had frequent falls, and appeared to throw himself about when walking. He worked as an errand-boy till the age of twenty, when he had to leave off on account of falling frequently and dropping the things he carried. Since then he has been unable to work in consequence of growing clumsiness and weakness, the latter gradually increasing so much that he has become unable to stand without support. Physical examination showed the thoracic and abdominal organs to be normal. When he is sitting down slight irregular movements of the body and head are seen, the latter being moved up and down or swayed from side to side. He is unable to stand unsupported, and when he rises from a sitting posture the feet are brought forcibly and ataxically to the ground wide apart from one another. When standing with the aid of some support, the swaying, irregular movements of the head, trunk, and limbs, and the irregular movements of the tendons on the dorsum of the foot, are very marked. The gait is very ataxic, resembling that of a drunken man; the feet are not raised high; he staggers from side to side and often crosses his legs. Movement of the arms is also ataxic—e.g., he touches the mouth with the forefinger instead of the nose; and when told, the arms being extended, to bring his forefingers together, fails to do so exactly, or

approximates them with great force. The ataxy of all movements is much increased when the eyes are closed. He is unable to hold things, or to perform any delicate action. The sense of posture of the limbs is not affected; he can lift and move his legs best when lying in bed. The muscles are flabby and small from disuse, but not wasted; there are no paralyses of any kind, and no contractures. Muscular actions of all kinds are weak. There is no tremor. Reactions to faradaic and constant currents slightly diminished or normal. Knee-jerks present, about normal. Plantar reflexes very brisk, causing movement of the whole limb. Cremasteric and abdominal reflexes normal. The tendon reflexes in the arms are diminished. Contractions of muscles to direct percussion of their mass not well obtained. No ankle-clonus. Sensation of all kinds quite normal; he has never at any time suffered any pain. Hearing, smell, taste, and sight good. Pupils equal; act well to light and accommodation. No paralysis of any ocular muscle. There is well-marked lateral nystagmus when the eyes are moved to the outer or inner canthus, but not otherwise. The optic discs and fundi are healthy. Speech is slow and rather hesitating, and at times jerky, with elision of syllables. Intelligence good. He can repeat a number of chapters from the Bible, and is very fond of reading. There are no trophic or vaso-motor symptoms. He suffers from constipation; there is no loss of control over the sphincters; the pulse is regular; the muscles seem occasionally to be a little stiff on first being called into action. (See engraving.)

CASE 2.—Isaac A——, aged eleven, is an intelligent boy, and looks healthy. Since the age of four his mother considers that he has been "restless," and that this restlessness increases. He often falls down when walking, and runs in a zig-zag way—i.e., from side to side, like a drunken man. He has had no fits or any bad illness. As he sits he lets his head fall back or from side to side, and keeps his mouth open; this gives him a stupid appearance; at the same time there are rocking movements of head and trunk. Standing with feet together, there is well-marked static ataxia; movements of tendons on dorsum of feet, and slight movements of shoulders, head, and arms, whilst the feet are shifted a little from time to time; when his attention is occupied—as by counting "fifty"—these movements become more marked. He stands by choice with his feet apart. None of the movements at all resemble those of chorea. With his eyes shut there is more general unsteadiness and decided increase in the swaying movements of the trunk and head. There are occasionally slight emotional movements about the mouth, not twitching. There is slight nystagmus on extreme convergence of the eyes. The pupils are equal, and act well to light and accommodation. Sensation and muscular sense normal, muscles firm, and strength fair. Special senses normal. Speech good. The tendon reflexes in the upper limbs were not obtained. The knee-jerk on the left side was about normal; that on the right diminished, but present. Plantar and other superficial reflexes normal. His gait is a little unsteady, and he is quite unable to stand on one leg. The movements of the upper limbs show some ataxy, which becomes more marked when the eyes are shut.

CASE 3.—Caroline, aged eighteen, staymaker. Has had no bad illness; is anæmic, but otherwise appears healthy. She had a fit occasioned by a severe fright when about the age of fourteen. The catamenia appeared at fifteen; since then she has generally had a fit at the onset of a period, but never in the intervals. The fits began with a feeling as if she were turning rapidly round and round; there is then a loud noise in the head, and she becomes unconscious; the period of unconsciousness lasts for half an hour. She is often bruised by the fall, but has never bitten her tongue or passed urine in the fits. In the morning, on first getting up, she suffers from a "jumping" of the muscles and violent spasmodic movements of the limbs or body, so that she drops anything that she may be holding, and, if standing, may be thrown to the ground; she is able, however, to get up again at once. These muscular spasms are more violent during the periods, when they last till midday; on other days they pass off by breakfast-time. I was not able to detect anything abnormal on a careful examination. There was no ataxy of movement. She has been under treatment for about three months without any benefit. I have not seen the patient in any of her fits, and, from the accounts related to me by the mother, could not positively decide that they were purely epileptic in character; on the whole, the evidence went to show that some were epileptic. The muscular contractions seemed to approximate most closely to the condition known as "myoclonus multiplex." It may be mentioned that, whilst drinking out of a jug one morning, spasmodic closure of the jaws occurred, during which she bit off a piece of the jug and swallowed it.

I examined three other members of the family, and found them healthy in all respects. No evidence could be obtained of any ataxy of movement in the parents or grandparents, or in any of the more distant relatives. It is interesting to note the presence of insanity, diabetes, and croup in the family history, and that the father was addicted to drink. The retention of the knee-jerk in this disease is also unusual; Dr. Griffith[1] states that, of 143 cases, the knee-jerk was reported absent in ninety-one, much diminished in seven, diminished in two, normal in six, normal or exaggerated in one, and exaggerated in six, whilst two of the cases exhibiting exaggeration belong to two of the most typical family groups of the disease.

Clifton.

THE

DISTRIBUTION OF SECONDARY GROWTHS IN CANCER OF THE BREAST.

BY STEPHEN PAGET, F.R.C.S.,

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AN attempt is made in this paper to consider "metastasis" in malignant disease, and to show that the distribution of the secondary growths is not a matter of chance. It is urged both by Langenbeck and by Billroth that the question ought to be asked, and, if possible, answered: "What is it that decides what organs shall suffer in a case of disseminated cancer?" If the remote organs in such a case are all alike passive and, so to speak, helpless—all equally ready to receive and nourish any particle of the primary growth which may "slip through the lungs," and so be brought to them,—then the distribution of cancer throughout the body must be a matter of chance. But if we can trace any sort of rule or sequence in the distribution of cancer, any relation between the character of the primary growth and the situation of the secondary growths derived from it, then the remote organs cannot be altogether passive or indifferent as regards embolism.

As regards the relation of the embolus to the tissues which receive it, there is a theory, strengthened by the support of Virchow, that the embolus has a "seminal influence" on the tissues in which it lodges, and that it can make them grow like itself. But there are carefully recorded microscopic observations by Schüppel, Bizzozero, Fuchs, Eberth, Andrée, Langenbeck, and Birch Hirschfeld which go against this theory; and in favour of it I can find only a doubtful case recorded by Brodowski, with a very imaginative picture, and a case, also doubtful, by O. Weber. On the whole, the evidence is against any theory that the embolus and the tissues which receive it may be compared to generative elements acting together. As Langenbeck says, every single cancer cell must be regarded as an organism, alive and capable of development. When a plant goes to seed, its seeds are carried in all directions; but they can only live and grow if they fall on congenial soil. The chief advocate of this theory of the relation between the embolus and the tissues which receive it is Fuchs.[2] He urges that certain organs may be "predisposed" for secondary cancer. He observes that in cases of melanotic sarcoma of the choroid he has sometimes found sarcomatous elements inside the capillary vessels of the retina, but that they do not grow in the retina as they grow in the liver and spleen. He quotes Cohnheim's experiments, who injected fragments of periosteum into the blood of rabbits, and succeeded in getting true tumours of cartilage and bone in their lungs; but these never attained to any marked power of growth. Cohnheim is of opinion that a healthy organ has a certain ability to resist the growth of such an embolus; and he speaks of "diminished resistance" as Fuchs speaks of "predisposition." This theory of predisposition receives

[1] Internat. Journ. Med. Sciences, Oct. 1888.
[2] Sarkom des Uvealtractus, 1882.

some support from an examination of the statistics of fatal cases of cancer.

I have collected 735 fatal cases of cancer of the breast, in each of which a necropsy was made and recorded. It is true that among them are some cases where death was due to the operation, and some cases where death came early in the disease. But the general results remain unchanged, and are of great interest.

First, is there any associated disease which occurs more often in women who die of cancer of the breast than in other women of the same age? In answer to this, it appears that fibroid tumours of the uterus are found with special frequency in women who die of cancer of the breast. Unfortunately, most of the 750 cases are not recorded with sufficient minuteness to make one sure that the occurrence of such an associated disease would be noted. But Sibley's statistics and the Middlesex Hospital Reports give 243 necropsies, very carefully recorded. No less than 27 had fibroid tumours of the uterus, 4 had polypus of the uterus, 8 had cysts of the ovary, and 3 had dermoid ovarian cysts. Take now, from the same reports, 244 necropsies on cases of cancer of the uterus. Only 7 had fibroid tumours of the uterus, and one of these is doubtful; only 1 had polypus, 9 had ovarian cysts, none had dermoid cysts. Again, take, from the same and similar reports, 75 necropsies on women who died of cancer of some part of the alimentary canal. Only 2 had fibroid tumours of the uterus, 2 had cysts of the ovary, 1 had a dermoid cyst of the ovary, and 1 had a dermoid cyst attached to the appendices epiploicæ. These figures do seem to justify a belief that fibroid tumours of the uterus are more often associated with cancer of the breast than with cancer of the generative organs or of the alimentary canal in women.

Next, there is some reason for thinking that the same holds good for other new growths. In 182 necropsies after cancer of the breast,[3] there were also found bronchocele, rodent ulcer, cavernous growths in the liver, cyst in the cerebellum, and fibrous and warty growths on the body; and one patient had, besides the cancer of the breast, also uterine polypus, dermoid ovarian cyst, molluscum fibrosum, and a fatty tumour on the shoulder. But in 200 necropsies after cancer of the uterus,[4] there was not a single new growth of any kind elsewhere, except the uterine and ovarian growths, which occurred in both sets of cases, and of which I have just spoken. Nor was there one in the 75 necropsies after cancer of the alimentary canal in women, except one blood-cyst of the breast. It is therefore not improbable that with the tendency in women to cancer of the breast there may be associated a tendency to outgrowths of other kinds and in other parts of the body, which is not observed in women who suffer from cancer of the generative organs or of the alimentary canal.

Then as regards "metastasis." Here, too, we shall find evidences of predisposition; we shall see that one remote organ is more prone to be the seat of secondary growth than another. In cases of cancer of the breast, it is strange how often the liver is the seat of secondary cancer. From different sources, I have 735 necropsies after cancer of the breast. Of these, 241 had cancer of the liver, only 17 had cancer of the spleen, and 30 had cancer of the kidneys or suprarenals. The lungs were involved in about 70 cases; but it is sometimes impossible to say whether the lungs or only the pleuræ were attacked, nor can we doubt that in cancer of the breast the lungs often suffer, not as remote organs, but by direct extension from the primary disease.

The same propensity of the liver to become diseased is shown in cases of cancer of the female generative organs. In 244 necropsies after cancer of the uterus, the liver was involved in 35, the spleen in 1 only, the lungs in 8, and the kidneys or suprarenals in 6, one of which was by direct extension. This frequency of secondary disease of the liver is of course a familiar fact; but it acquires fresh interest when we contrast it with the immunity enjoyed by other organs. The spleen has, so to speak, the same chances as the liver; its artery is even larger than the hepatic artery; it cannot avoid embolism. Yet the liver was the seat of cancer in 276 cases; the spleen in 18 only. Such a great disproportion cannot be due to chance. For in pyæmia no such disproportion exists. I have tabulated 340 necropsies after pyæmia, and I find that abscess of the liver occurred in 66, and abscess of the spleen in 39—a very different proportion from that of 276 to 18.

The disproportion is not so great in melanotic cancer. Taking the record of necropsies by Fuchs,[5] Eiselt,[6] and Pemberton on Melanosis, we find that in 129 necropsies the liver was affected in 77 and the spleen in 17.

Again, if we take the 735 necropsies after cancer of the breast, we find that the ovaries, one or both, were involved in no less than 37 cases; that is to say, twice as often as the spleen, and about as often as the kidneys and spleen put together. This can hardly be chance. And in two of the cases the ovaries alone of all the organs were diseased. It is of one of these two cases that Dr. Coupland says: "To evoke the fact of the physiological sympathy of two such widely removed organs to explain such a case as this is a view perhaps too fanciful to be entertained, but yet it is difficult to put such a consideration entirely out of sight."

Let us now see what is the case as regards the bones in cancer of the breast. If we consider how favourable the lymph glands are to the growth and spread of cancer, and how close the connexion is between the lymph glands and the medulla of the bones, we may look to find something of interest among the cases where the bones were involved. In the first place, there is reason for believing that a general degeneration of the bones sometimes occurs in cases of cancer of the breast, yet without any distinct deposit of cancer in them. Thus Török and Wittelshöfer,[7] in their analysis of 336 necropsies on cases of cancer of the breast, say: "Besides the cases where the bones were manifestly diseased, there were 8 cases of that peculiar brittleness and softness of different bones mentioned by Rokitansky, Lücke, and others, where a cancerous degeneration could not be made out." To these 8 cases we may add the following post-mortem observations from the Middlesex Hospital Reports and from Billroth[8]

1. Female, aged fifty-six. Cancer of right breast and axillary glands; one nodule in the heart. "Ununited fracture of femur; an associated lesion, not due to cancer."

2. Female, aged fifty-three. Recurrent cancer of right axillary and clavicular glands, pleura, and liver. "Upper part of right thigh, old ununited spontaneous fracture. Left thigh also fractured. In moving the body the right humerus broke just above the elbow. Ribs and sternum very brittle. No sign of cancer in connexion with either of the fractured bones. Skeletal condition like osteomalacia; cortex thinned, medulla diffluent."

3. Female, aged forty-eight. Recurrent cancer in left breast and axillary glands. "Mollities ossium (carcinomatous?)."

4. Female, aged forty-six. Recurrent cancer in breast and liver. "Bones very brittle."

5. Female, aged sixty. Cancer of right breast and glands. Nodules in cranium and dura mater. "Fracture of left humerus; uncertain whether cancerous."

6. Female, aged forty-eight. Cancer of breast, axilla, and liver. "Mollities of cervical spine; lateral curvature."

Here, then, are fourteen cases, besides those noticed by Rokitansky, Lücke, and others, where cancer of the breast was associated with brittleness of the bones, or softness, or ununited fracture. Perhaps this fact may be compared with the extraordinary frequency of malignant disease in cases of osteitis deformans. However this may be, it seems certain that it is not a matter of chance what bone shall be attacked by secondary growth. Who has ever seen the bones of the hands or the feet attacked by secondary cancer? Out of 650 necropsies in cases of cancer of the breast, which give full details as to the distribution of the secondary growths, there is not a single case where the hands or the feet were affected, not one of disease of the radius, ulna, or fibula, and only one of the tibia. In contrast to this, the femur was affected, either by spontaneous fracture or by distinct deposit of cancer, 18 times; the humerus, 10 times; and the cranium, 36.[9] As regards the femur, the deposit of cancer seems generally to affect the medulla of the upper part of the bone; we read of it as occurring "just below the small trochanter," or "at the junction of the shaft with the great trochanter," or "at the junction

[3] Middlesex Hospital Reports and Billroth.
[4] Middlesex Hospital Reports.

[5] Das Sarcom des Uvealtractus. [6] Ueber Pigment Krebs.
[7] Langenbeck's Arch., xxv., 4. [8] Beiträge z. Stat. der Carcinome.
[9] This high figure for the cranium is due to Török and Wittelshöfer, who say that, in 336 necropsies in cancer of the breast, the cranium was diseased in 33. Probably they include the brain &c

of the upper and middle third."[10] It does not appear that the femur is so often the seat of secondary growth in other forms of cancer. Thus, in 132 necropsies in melanotic cancer, mostly of the choroid or of the skin, reported by Fuchs, Eiselt, Pemberton, and others, though the bones were freely affected, the femur suffered only in one case, and the humerus not at all.

The evidence seems to me irresistible that in cancer of the breast the bones suffer in a special way, which cannot be explained by any theory of embolism alone. Some bones suffer more than others; the disease has its "seats of election." The same thing is seen much more clearly in those cases of cancer of the thyroid body where secondary deposits occur in the bones with astonishing frequency. It is of these that Lücke[11] says: "Secondary tumours occur with striking frequency in the bones, both in the shafts and in the epiphyses. They may attain very considerable size and become much larger than the primary growth." He and Lebert and others have recorded such cases. I have collected notes of about 20; no less than 10 of these had masses of the growth in remote bones; in some cases the disease had attacked half-a-dozen bones at once. A contrast to this involvement of the bones in this form of cancer is found in their freedom from disease in cancer of the stomach and pylorus. In 903 necropsies in this disease, collected by Gussenbauer and von Winiwarter,[12] the bones were not affected in a single case; unless, perhaps, they were affected in some or all of the 11 cases, among the 903, where "general carcinosis" finally took place.

All reasoning from statistics is liable to many errors. But the analogy from other diseases seems to support what these records have suggested. The eruptions of the specific fevers and of syphilis, the inflammations after typhoid, the lesions of tuberculosis, all show the dependence of the seed upon the soil. The best work in the pathology of cancer is now done by those who, like Mr. Ballance and Mr. Shattock, are studying the nature of the seed. They are like scientific botanists; and he who turns over the records of cases of cancer is only a ploughman, but his observation of the properties of the soil may also be useful.

Wimpole-street, W.

EXHAUSTION PARALYSIS.

BY C. W. SUCKLING, M.D. LOND., M.R.C.P.,
PROFESSOR OF MATERIA MEDICA AT THE QUEEN'S COLLEGE, AND PHYSICIAN TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

DR. CH. FÉRÉ, M.D. Paris, recently published an article in *Brain*, Part 42, on "Paralysis by Exhaustion," meaning paralysis produced by excessive and prolonged voluntary movement involving exhaustion of the nerve centres. Hemiplegia after repeated and violent epileptic attacks is an instance of this variety of paralysis. Excessive exercise of one arm may not only produce what is called a professional hyperkinesis, but paralysis also. Hammer palsy was described in 1869 by Frank Smith of Sheffield. It was observed in men who had to work for many hours with a small hammer which had to be rapidly wielded. In these cases the individual was usually anæmic, and the paralysis was hemiplegic in distribution, though more especially affecting the arm; aphasia and sensory disturbances were also occasionally present. In one case, in addition to marked paresis, there was inability to write, and cramp increased when the patient tried to use a hammer. Dr. Féré relates two cases of exhaustion paralysis occurring in his practice. One patient, a blacksmith, after two hours' extra work, noticed that the hammer was unusually heavy and that his hand felt numbed. The next day his right arm was powerless and the right leg weak. Dr. Féré found that he had hemiplegia, the face being affected, and there being considerable anæsthesia on the right side. The patient had almost completely recovered in three weeks. In the second case, a young lady with a neurotic family history, after practising at the piano for nine hours, noticed that her hand was heavy and clumsy; the leg was also weak and both limbs anæsthetic. In a fortnight recovery was almost complete.

I have had the good fortune to meet with a very typical instance of exhaustion paralysis at the Birmingham Workhouse Infirmary. A woman, fifty-one years of age, was admitted into the infirmary on Sept. 22nd suffering from cramp and paralysis of the right leg. She had followed the occupation of cook in a large factory, and had been accustomed to standing for many hours a day, the usual hours being from 6 A.M. to 9 P.M. She would perhaps sit down for a few minutes to her meals, but certainly for not more than half an hour in the day. Besides being constantly on her legs, going up and down stairs, she had to lift and carry heavy weights. She had worked at the factory for some months, and had always left her work completely tired out. Latterly she had noticed that her right leg felt tired towards the end of the day. A few days before her admission, her mistress having been taken ill, she was obliged to stay even later to do overtime, as she called it; and on Sept. 21st, as she was walking home from her work, she was seized with numbness and cramp in the right leg and foot, and was obliged to be carried home, being unable to walk or stand. During the night she was seized every few minutes with violent cramps in the right lower extremity, which occasioned much pain and prevented sleep. When I saw her on the 22nd I found that the right leg was completely paralysed, and observed two or three attacks of violent spasm of the muscles of the thigh and leg. The patient complained of numbness of the whole of the right leg, and of the right side of the body up to the under surface of the right breast. There was distinct but not complete anæsthesia, tactile, thermal, and painful impressions being only slightly perceived in the right lower extremity. The muscular sense was also much impaired, for on the left side she could distinguish between one-ounce and two-ounce weights, while on the right side she could not distinguish between one-ounce and six-ounce weights. The plantar reflex was lost on the right side, but the knee-jerk was excessive. There was no ankle-clonus. There was no bladder or rectal trouble, no retinal changes, no fever, and no albuminuria. There was no neurotic family or personal history, and no trace of hysteria about the woman. She had ceased menstruating for some years, and had enjoyed good health, though she had occasionally noticed numbness in her right hand. The right upper extremity was unaffected, and there was no trace of any facial paresis and no cerebral disturbance. A hypodermic injection of morphia and atropia greatly allayed the attacks of spasm. A mixture of bromide of potassium, chloral, and belladonna was prescribed, and the limb was gently rubbed. On the 23rd the patient was free from cramp, and could lift the leg from the bed, though sensation was still impaired. She improved daily, and in ten days' time was able to walk about, and was discharged perfectly well.

There is no doubt that this was a typical case of functional akinesis or exhaustion paralysis; and it is evident that not only is there a professional hyperkinesis such as writer's cramp, telegraphist's cramp, &c., but also a professional akinesis or exhaustion paralysis, and that there is a close association between them, as shown by their occasionally occurring together in the same subject. A point worthy of notice in the history of the reported cases of exhaustion paralysis is that, though the individual may have worked very hard for years, nothing happens until there is a call for still further effort, when the machinery at once fails. The quick recovery of these cases of exhaustion paralysis contrasts very strongly and favourably with the tedious and slow recovery observed in cases of professional hyperkinesis. Exhaustion paralysis must be added to the list of functional paralyses and its existence borne in mind, for a mistaken diagnosis may readily be made, the paralysis being very complete and often hemiplegic in distribution, with implication of the facial muscles. The functional paralyses described in text-books are (1) hysterical, (2) ideal, (3) reflex, (4) malarial, and (5) anæmic. There were no indications of hysteria in my case, the patient being a hard-working and very matter-of-fact kind of individual, not at all of the neurotic type, and extremely anxious to get out of the infirmary to go to work again. The cramps occasioned very severe pain, and in the intervals between the attacks of cramp the leg was completely paralysed and flaccid. She complained of severe pain round the right side of the body under the right breast

[10] See, for four more cases, Ormerod's Clinical Collections, p. 202, and C. Hawkins' Contributions to Pathology, ii., 124.
[11] Krebs der Schilddrüse. [12] Langenbeck's Arch., xix., 372.

(girdle pain), which was strongly suggestive of some lesion of the right half of the spinal cord. The rapid though gradual recovery with rest, the absence of any relapse or shifting of the symptoms to the other extremities, and the occurrence of the symptoms after prolonged fatigue seem to me to make the diagnosis of exhaustion paralysis far more likely than that of hysterical paralysis. The case was distinguished from one of ideal paralysis by the presence of the cramps and anæsthesia, by the absence of any traumatic history, by the mode of recovery, and by the temperament of the patient. Reflex, malarial, and anæmic paralysis scarcely need consideration in connexion with the above case. In the two latter forms of paralysis both lower extremities are affected; and as regards reflex paralysis, in my case there was no source of irritation to be discovered.

Birmingham.

ON A CASE OF DACTYLITIS SYPHILITICA.

BY FREDERICK W. LOWNDES, M.R.C.S. ENG.,
SURGEON TO THE LIVERPOOL LOCK HOSPITAL.

I WAS requested some time ago to see a married woman aged thirty-five, the mother of three living children, the youngest being ten years old, and all in excellent health. Three years ago she gave birth to a fourth child, which lived eleven months and then died from bronchitis, as given in the certificate of death. The mother stated that it was always crying, and could not be pacified. My patient was infected with syphilis by her husband ten years ago. He appears to have had the disease in a very mild form, to have suffered very little, and required little treatment. She was treated from the first appearance of the primary affection, and appears to have escaped any secondary affections until lately, when she had obstinately recurring specific ulcers on the arms and legs, a scaly rash on the face and scalp, while nearly all the fingers on both hands were swollen and painful six months before I saw her. She had been for some time under medical treatment, which appeared to have relieved her for a while, when the disease would again break out, and all the appearances would recur in full force. She had been taking iodide of potassium and perchloride of mercury in full doses.

When I first saw the patient, about the middle of December last, she was in bed, with a scaly rash on the scalp and forehead and ulcers on the arms and legs in various processes of healing. On seeing her hands, I was at once reminded of the engravings of the various forms of dactylitis syphilitica in Bumstead and Taylor's "Pathology and Treatment of Venereal Diseases" (fifth edition, pages 728 to 732). The left hand was first affected, the disease commencing in the first phalanx of the middle finger, next in that of the index finger, and then in the little finger. The right hand was affected later on; the index and middle fingers were the first to suffer, then the little finger. In each hand the thumb and ring finger had escaped. The nands were naturally well formed, and the contrast between the sound and the affected fingers was most striking. The swellings were of a somewhat globular form, and, though at first tender, became less so under treatment.

The rash and ulcers were treated locally with one part of ung. hyd. ammoniat. and three parts of ung. zinc. Later on this was changed to an ointment first suggested by Dr. Henry O'Neill of Belfast, and composed as follows: iodoform and calomel, half a drachm of each; ol. oliv. opt., two drachms; ol. rosmarin., five to ten minims; lanolin, five drachms. I have found this most useful in syphilitic eruptions of all kinds, and I can confidently recommend it. The oil corrects the stickiness of the lanolin, while the oil of rosemary effectually disguises the smell of the iodoform. As the patient's constitution appeared to be good, and she had not been salivated, I gave her two grains of hyd. c. cret. with two grains of pulv. ipec. co. and ext. hyoscyam., sufficient to make a pill, twice a day; also five grains of iodide of potassium in a mixture, with ten grains of acetate of potash in water, three times a day after meals, and, as the patient had no appetite, small doses of nitro-muriatic acid with tincture of orange before meals. I increased the dose of iodide subsequently to ten, fifteen, and twenty grains; this was borne very well, as were also the mercurial pills. The improvement in the patient's condition was most marked. The rash on the face and scalp, which had been a great distress to her, soon disappeared, and has not returned; the ulcers were also soon healed. The fingers required much more time and most patient treatment. The swelling on the right index finger burst at the metacarpo-phalangeal joint, thick yellow matter was discharged, and an ulcerated surface remained, which healed up under treatment. The little finger of the right hand was the most seriously affected of all; the swelling burst also at the metacarpo-phalangeal joint, and a gaping surface remained, which, with the obstinately contracted state of the finger, made me fear that there would be permanent deformity. Fortunately this was averted by keeping the finger extended, by the application of mercurial plaster alternated by strips of lint spread with mercurial ointment, and the continuation of the internal treatment. The fingers are all gradually resuming their normal shape, though the right middle finger is still somewhat large. The patient is now able to come and see me, and is a great contrast to what she was when I first saw her. I have recommended the removal of some very decayed teeth which had somewhat retarded her progress.

That this form of syphilitic affection, especially the acquired form, is comparatively rare, is generally admitted. Until Dr. Taylor of New York gave it the prominence of a separate chapter in his work previously alluded to, only isolated cases had been recorded by various authors. He observes that it was formerly called "syphilitic panaris"; and, writing in 1883, he states that he had then seen ten cases. Messrs. Berkeley Hill and Arthur Cooper, in the second edition of "Syphilis and Local Contagious Disorders," imply that it is a rare affection, and Mr. Hill, in a letter to me, says "such cases are rare." Mr. Jonathan Hutchinson, in his "Manual of Syphilis," says, at p. 455, "The affection, however, is not a common one." During the twelve years 1875 to 1887 I never saw a case among the patients in the Lock Hospital, although cases of tertiary syphilis were not uncommon, and patients used to come who had been in the hospital many years previously for primary disease. Hence we had opportunities of witnessing late forms of syphilis, and had dactylitis not been an uncommon form we must have seen it. I cannot remember seeing a case previously in private practice; and, from what I have heard from many medical friends whom I have consulted as to this question, it is evident that the acquired form of this disease is very rare. I have therefore thought it well to publish this case.

Liverpool.

CASES OF RUPTURED MEMBRANA TYMPANI FROM BOXING THE EARS;

LOSS OF TASTE FOLLOWING PERFORATION OF THE DRUMHEAD.

BY W. R. H. STEWART,
AURAL SURGEON TO THE GREAT NORTHERN CENTRAL HOSPITAL, AND SURGEON TO THE LONDON THROAT HOSPITAL.

THE first three of the following cases emphasise the fact that boxing the ears is a most objectionable form of correction or amusement, and cannot be indulged in without danger. The last two show that the chorda tympani may be implicated, with consequent loss of taste, when the drumhead is wounded. In Cases 1 and 2 the patients came at once to be treated, and were cured. But in Case 3, which did not receive prompt attention, the result is most disastrous: the patient is perfectly deaf on the one side, all the ossicles having come away; he has had to endure off and on the misery of a fetid discharge from the meatus; and being minus a drumhead, the natural guardian of the middle ear, he is liable to any of the serious consequences that may follow middle-ear catarrh. In Case 4, the perforation was of a fair size and the nerve wounded, but the perforation was healing and the sense of taste and hearing power returning, though slowly, when the patient left off attending. As the case was doing so well, this was the more to be regretted, for now, without treatment, a chronic suppuration with all its fatal sequelæ may be established. In Case 5 the wound was slight, and the patient quickly recovered; but the case serves to show one of the dangers of employing a hairpin (an

instrument far too frequently resorted to) as a means of allaying irritation in the meatus, and to point a warning against its use.

CASE 1.—J. D——, aged nine, a schoolboy. Two days previously his teacher had boxed his ears. He felt at the time and had since suffered from great pain in the ear, with complete deafness on that side. Examination showed a much-congested drumhead, with a large rent across the lower part, below the handle of the malleus (Fig. 1). Four leeches in front of the tragus, with repeated hot fomentations of a solution of boracic acid, quickly reduced both pain and congestion, and the rent in the membrane soon healed.

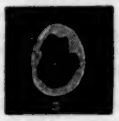
FIG. 1.

CASE 2.—A. S——, aged thirty-three, a married woman, stated that when larking with her husband a few days previously he had boxed her ears. She immediately felt a sudden and acute pain, which increased in intensity, with complete deafness on that side. There was a good deal of tenderness on pressing the tragus, and, on examining the membrane, it presented much the same appearance as in the previous case—viz., congestion, and a large rent extending along the inferior portion below the handle of the malleus (Fig. 2); through the rupture some slight discharge was oozing. Under the influence of leeches and hot boracic fomentations the pain and congestion soon disappeared, but the rent took some time to heal, the edges having to be touched several times with nitrate of silver.

FIG. 2.

CASE 3.—G. H——, aged sixty, when a boy, was struck on the ear. He suffered great pain at the time, and ever since has been deaf on that side, and has had off and on a more or less offensive discharge from the ear. Examination showed that, with the exception of a ring round, the membrane was destroyed (Fig. 3), the ossicles had disappeared, and there was a chronic inflammatory condition of the tympanic cavity. Under a boracic acid and alcohol lotion, with absolute cleanliness, the discharge soon ceased; but of course deafness was complete on that side, and there could be no restoration of the membrane.

FIG. 3.



CASE 4.—A. N——, aged forty-four, a labourer, whilst loading a cart with straw, was struck on the side of the head by a falling truss. He felt immediate and severe pain, which almost made him faint, and since the accident he has been deaf and unable to taste with that side of the tongue. The membrane showed a considerable amount of congestion, and at the upper and posterior portion, behind the handle of the malleus, there was a rather large perforation (Fig. 4). Leeches and fomentations were ordered, which quickly reduced the pain and congestion, and when I last saw the case the perforation was healing, and the taste and hearing power returning.

FIG. 4.

CASE 5.—J. L——, aged twenty-two, was pricking her ear with a hairpin, when a child which was in her lap suddenly jerked her arm and forced the pin into her ear, causing great pain, deafness, and loss of taste on the same side of the tongue. There was some injection of the membrane, and a small perforation in about the same situation as in Case 4 (Fig. 5). She very quickly got well under treatment, the perforation healing, and the taste and hearing returning.

FIG. 5.

Devonshire-street, W.

DENTAL HOSPITAL, LONDON.—At the annual general meeting of the governors of this institution, the report, which was adopted, showed a gratifying increase in the annual subscriptions. The committee, however, urgently appeal for £3000 to clear off the mortgage debt on the hospital. There were 51,406 cases treated last year, as against 47,441 in 1887, being an increase of 3965 cases.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF SARCOMA OF THE CLAVICLE; REMOVAL OF THE TUMOUR; DEATH FROM SEPTICÆMIA; REMARKS.

(Under the care of Mr. ROUSE.)

THE removal of part or the whole of a clavicle for tumour is so very unusual that we have thought the notes of the following case well worth insertion. Although Remmers performed the first partial removal of the clavicle in 1732, it was not until many years later that the entire bone was removed by McCrearry of Kentucky. Ashurst gives a series of twenty-eight complete excisions of the bone, with a mortality of 22 per cent. The operations were performed for the following diseases: Cancer, 2; necrosis, 7; osteo-sarcoma, 4; malignant disease of doubtful character, 1; for gunshot injury, 2; once for other tumours, once for injury, and once for osteitis. Agnew's table includes thirty-four, as follows: Cancer, 10; necrosis, 5; osteo-sarcoma, 5; malignant disease of unknown character, 6; for gunshot injury, 2; exostosis, 1; for other tumours, 2; after injury, 1; cause unknown, 2. Ashurst also quotes another table of seventy-four cases of incomplete removal with a known mortality of 14·5 per cent. These tables indicate the various diseases for which the operation has been performed, but beyond that they are of little value. Each case will have to be considered by the surgeon on its own merits, with the extent of local disease and the presence or absence of secondary growths when the disease is of malignant character. The removal of the bone for necrosis after acute periostitis is not a difficult operation, and has been performed in recent years by Wheelhouse[2] (who pointed out the fact that the whole bone is usually necrosed, as it may be looked upon as perfect at birth) and by Bland.[3] The bone is regenerated, as was shown by Irvine.[4] The operation is a most formidable one, for new growths, especially when the tumour has attained a large size; the proximity of the important vessels, and on the left side the thoracic duct, which may be adherent, requiring the greatest care and skill to avoid wounding these important structures, arrest hæmorrhage, and guard against entrance of air into any veins. In the removal of a sequestrum the posterior layer of periosteum presents a sufficient defence against injury of the vessels, which adhesion to the sheath of a tumour may render it impossible to avoid. The contrast between the operation for necrosis and that for osteo-sarcoma is nowhere better exemplified than in the celebrated case in which Mott removed the greater part by an operation which lasted four hours. This was done in 1828, and the patient, aged nineteen, lived fifty-four years after it, dying from other causes. The use of the arm was fully retained, and a ligamentous band formed in the place of the bone. We may refer to the following:—Polaillon[5] removed the clavicle from a girl aged sixteen for a growth of bony character of eighteen months' standing. He made a large flap with the base towards the neck of the patient; the wound was well in six weeks, and the movements of the arm perfectly preserved. Wheeler[6] removed a dense firm growth from a man aged forty-three; at the end of nine years the patient was in good health, and there was no evidence of local recurrence. He also operated for necrosis of the clavicle. The Transactions of the Pathological Society record a few examples of sarcoma of this bone removed post mortem. In one instance the growth produced death by pressure on the trachea within seven weeks after its known commencement. For the notes of the case we are indebted to Mr. Bull

[1] Vol. iv., 1884. [2] Brit. Med. Journ., vol. i. 1885, p. 477.
[3] Ibid., vol. i. 1883, p. 204. [4] THE LANCET, vol. i. 1867, p. 206.
[5] Ibid., vol. i. 1885, p. 718.
[6] Ibid., p. 1167; and Trans. Acad. Med. Irel., p. 173

H. J——, aged twenty-nine, a draper's assistant out of employment, was admitted into St. George's Hospital on April 23rd, 1886. There was no history of heritable disease. He had measles and scarlet fever in childhood, but no intercurrent maladies. He denied having had any venereal disease. Six weeks previously to coming to the hospital he thought he strained his left shoulder while at work, and soon afterwards he noticed a small lump in the centre of the left collar-bone. The tumour grew very rapidly for four weeks, and had by then attained the same size as when first examined. There had been no increase in size during the previous fortnight, and no marked loss of flesh.

On admission, the man was thin and slightly anæmic. There was a musical systolic murmur over the heart, which culminated over the apex in the fifth space just internal to the nipple line, was audible in the axilla, and was lost at the base; the second sound was clear. Urine: no albumen or sugar; sp. gr. 1016. The inner two-thirds of the left clavicle was involved in a new growth. The acromial end was free from disease for about an inch and a half, and then the contour of the bone was lost in a tumour which extended up to, but apparently did not implicate, the sterno-clavicular joint. Superiorly, the growth extended to the level of the upper border of the sixth cervical vertebra, and had pressed upon the external jugular vein. Inferiorly, it reached as low as the upper margin of the left third rib. Externally, it almost reached to the coracoid process. The skin was not adherent to the tumour. The veins were considerably enlarged over the growth. The surface of the tumour was slightly lobulated, and no impression could be made on it by pressure. There were no cysts, and no bony plates could be felt. Egg-shell crackling, pulsation, and bruit were all absent. The scapula was free from disease, and no tumour could be felt elsewhere. The axillary and cervical glands were not enlarged. There was no evidence of pressure on the subclavian vein or on the brachial plexus.

On April 29th Mr. Rouse removed the tumour and clavicle. An incision about ten inches in length was made over the line of the clavicle from the sternum to the acromion, and the skin was dissected off the growth. The clavicular origin of the sterno-mastoid and pectoralis major muscles were divided, and the limits of the tumour defined as far as possible. The acromio-clavicular joint was then opened and the coraco-clavicular ligaments divided. This enabled the clavicle to be prised up and the growth separated from the subjacent tissues. This was done partly by tearing with the finger and partly by dissecting. Many small veins were divided, and at once clamped. The subclavian vein was partially embedded in the tumour, and was wounded in two places—(*a*) as it passed under the clavicle, and (*b*) close to its junction with the internal jugular vein. The punctures were picked up with forceps, and a fine catgut ligature was tied round each opening. The outer end of the clavicle was seized with lion forceps, and the tumour and clavicle easily twisted out when the sterno-clavicular ligaments were divided. The skin was united with silver sutures, a drainage-tube introduced, and the wound dressed with dry salicylic wool. The operation lasted thirty-five minutes; the man was very collapsed at its termination. About ten veins were tied, but no artery required a ligature.

The man did well for three days, when the wound became foul, and this was followed by a rise of temperature to 104·2° F. From this time he rapidly became worse, and died from septicæmia on the eighth day after the operation.

Necropsy.—The punctures in the subclavian vein were healed. There was some enlargement of the cervical lymphatic glands, and some sero-sanious fluid in the left pleural cavity. No lymph on the pleura. Viscera otherwise healthy. The blood was abnormally fluid: no pyæmic deposits were found. Microscopical examination of the tumour showed it to be a spindle-celled and in some places myeloid sarcoma.[7]

Remarks by Mr. BULL.—The removal of the clavicle for sarcoma is an uncommon operation, and may be one of great difficulty. The death of this patient from septicæmia is to be deplored, but it is interesting to note that the wounds in the subclavian vein had nothing to do with the fatal issue, which was clearly due to the wound becoming septic. The removal of the tumour and clavicle in one man has not always been possible in similar cases. The case also shows that lateral ligature of a main vein is not perhaps a serious complication.

[7] See Path. Soc. Transactions, 1887, p. 287.

CALCUTTA MEDICAL COLLEGE HOSPITAL.

CASE OF FIBROMA OF PHARYNX; OPERATION; REMARKS.

(Under the care of Brigade Surgeon K. M'LEOD, M.D.)

TUMOURS of the pharynx are uncommon, and the following case is an example of an unusual method of removal, as well as of a rare variety of growth. Baumer[1] says: "When tumours of the posterior pharynx occur in adults we should always think of syphilis" (alluding to the frequency of gummata as compared with other growths), while in children retro-pharyngeal abscesses are more apt to be due to tubercular disease of the spine. Dr. F. Taylor[2] brought forward a tumour which had caused the death of a child aged four, composed of fat which had simulated abscess during life, showing an occasional source of error in diagnosis. Mr. Sydney Jones[3] removed a lipoma of irregular lobulated form from the right arytenoepiglottidean fold of a man of forty years of age; it hung down into the pharynx as a smooth tumour of about two inches in diameter, and was easily shelled out after incision of the mucous membrane. Mr. Holt[4] showed a pedunculated fatty tumour removed post mortem from an old man of eighty, who had died suddenly; it had been known to exist for twelve years. There is a specimen of similar character, but of much smaller size, in the museum of the Royal College of Surgeons. It is lobulated, measures two inches by about half an inch, and was attached by a slender pedicle. Dr. Hartley[5] recorded a case of large encapsuled tumour, weighing, when removed post mortem, 1 lb. 1 oz., of supposed congenital origin. It was taken from the pharynx of a child aged two years after a tracheotomy rendered necessary by the obstruction to respiration caused by the growth. Voltorini described a case under his care in which a fibroid tumour the size of a pigeon's egg was removed from the posterior wall of the pharynx. There is also a pedunculated firm fibrous tumour in the Royal College of Surgeons museum which was removed from this region. Other simple tumours are found extending into the pharynx from the nose; also papillomata of small size. In both these cases the tumour was removed by external incision, with preliminary tracheotomy in one instance. The following account is taken from the notes of Assistant-Surgeon A. K. Shaha.

CASE 1. *Fibrous tumour of pharynx; preliminary tracheotomy; pharyngotomy; removal by écraseur; death by secondary hæmorrhage on the fourth day.*—The patient was an otherwise healthy man, thirty-five years of age, a Hindu, who had suffered from difficulty of deglutition for at least three years. A tumour was discovered in his pharynx about that time, which the man could feel with his finger.

On admission, it was observed that he was thin, and held his head forwards. He spoke with difficulty in a hoarse voice, and experienced considerable trouble in breathing and swallowing. On inspecting the mouth and fauces, nothing could be seen; but on examining the pharynx with the finger, a smooth, firm, globular tumour could be felt, which seemed to occupy the whole cavity; its attachment could not be made out. The larynx was very prominent, and could be moved freely up and down and from side to side. The pharynx seemed also to glide on the surface of the vertebral column. No tumour could be felt externally, and none of the glands of the neck were enlarged.

It was decided to perform a preliminary tracheotomy, and then to open the pharynx, examine the tumour thoroughly, and deal with it according to circumstances. On the morning of Nov. 4th chloroform was administered, the trachea was opened below the cricoid cartilage, and a full-sized silver tube inserted. Chloroform was then administered through the tube. As soon as his breathing became regular and tranquil, an incision about three inches in length was made along the anterior border of the sterno-cleido-mastoid, with its centre opposite to the pomum Adami. The fascia proceeding from that border to the larynx was divided, and the sheath of the vessels separated by the finger and director from the omo-hyoid and sterno-hyoid muscles. The pharynx

[1] Ziemssen's Cyclopædia, vol. iv., p. 202.
[2] Trans. Path. Soc., vol. xxviii., p. 216.
[3] Ibid., vol. xxxii., p. 243.
[4] Ibid., vol. v., p. 123.
[5] Medical Times and Gazette, vol. i. 1883, p. 640.

was now reached, and the tumour felt. An incision was made in the side of the pharynx, which admitted the finger, and the tumour was then found to be a smooth globular mass about the size of a small orange, attached by a broad pedicle to the left ary-epiglottidean fold, and below it. By enlarging the incision up and down, the lump was easily turned out; the chain of an écraseur was passed round its pedicle, and it was removed without any difficulty or bleeding; the instrument dividing the mucous membrane circularly and dissecting out the tumour neatly. Only two small arteries required ligature, and the wound was not stitched. He spent a comfortable day, and was fed with milk by means of a funnel and tube at 3, 4.45, and 7 P.M.

On Nov. 5th the man was fed five times with the tube. There was a slight rise of temperature (101°) in the evening, but his condition was otherwise quite satisfactory. The temperature subsided to 99° by the morning of the 6th. There was slight œdema of the neck. The tracheotomy tube was removed, as he could breathe and talk without difficulty. He was fed repeatedly during the day with the tube. On the morning of the 7th the œdema was found to have subsided, and the wound looked clean. He breathed freely and talked clearly. At 4.30 P.M. he had a fit of coughing, which was followed by severe deep bleeding, which caused dyspnœa and exhaustion. A vessel was tied and pressure applied. He rallied somewhat under treatment; but there was a recurrence of the bleeding after an attempt to vomit at 11 P.M., when another ligature was applied and the wound stuffed with lint. The tracheotomy tube was reinserted. No further bleeding took place; but he gradually sank, and died of asthenia at 7 A.M. of the 8th. Blood appears to have found its way into the lungs, for clots were observed to be ejected from the tracheal wound. A necropsy was not allowed. The tumour was examined by Dr. Gibbons, who found it to be a soft fibroma.

Remarks by Dr. M'LEOD.—This case is interesting from several points of view. 1. On account of its rarity. Fibroma of the pharynx is a rare disease. The size which this tumour attained without actually stopping respiration and deglutition altogether was remarkable. The globular mass must have acted as a sort of ball-valve to both glottis and œsophagus. 2. The method of removal. External pharyngotomy, with subsequent use of the chain écraseur, was simple and effective. 3. The mode of death was alike unexpected and unfortunate. The probability is that the act of coughing caused some of the arteries of the pedicle, which had been temporarily sealed by *écrasement*, to start. Whether retention of the tracheotomy tube, by facilitating ejection of tracheal mucus, would have prevented the accident is a very open question.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Complete Rupture of Bronchus.—Melanotic Sarcoma of Liver.—Lymphoma of Stomach and Intestine.—Talipes.—Fibromatous Tumour of Scarpa's Space.—Caseating Gland in Trachea.—Embolic Aneurysm.

AN ordinary meeting of this Society was held on March 19th, the President, Dr. W. H. Dickinson, being in the chair.

Mr. SHEILD exhibited a specimen of complete Rupture of the Left Bronchus, at its junction with the trachea. It was taken from the body of a man, aged forty-seven, who had been violently crushed between a van-pole and a wall, the accident proving quickly fatal. In addition to other extensive injuries to the thorax, the third and fourth ribs were broken posteriorly, the fractured ends projecting into the mediastinum. Much blood was effused here, the pericardium was torn, and the aorta ecchymosed, but the heart and main nerves, with the œsophagus, were intact. The lungs were bruised, and not torn. The bronchus was probably lacerated by a fractured rib. Allusion was made to the rarity of the accident, which was hardly alluded to in textbooks or in special articles on injuries to the chest. The museums of Middlesex and St. George's Hospitals contained specimens, and a case of penetrating wound of the bronchus was related in vol. x. of the Transactions of the Society.

Dr. WEST related a case of Rupture of the Aorta, which was admitted into St. Bartholomew's Hospital, the patient living four hours. There was no external wound, and the case showed the amount of damage that might be done internally without fracture or sign of external violence.

Dr. NORMAN MOORE showed a section through a Liver which had been enormously enlarged by the infiltration of a Melanotic Sarcoma. The entire liver weighed sixteen pounds when it was removed from the body. The section showed large nodules of a black colour and circular in outline, which were separated from each other by strong white septa. In some parts the growth was diffuse and of a grey colour, but nowhere could a trace of liver tissue be discerned. Similar growths were found in the mesenteric glands and in both kidneys. The peritoneum showed numerous minute specks of the same growth, and there was one in the skin of the left axilla the size of a pin's head. There was no new growth in the chest, and none in the spleen. The specimen was obtained from a printer's warehouseman, aged forty-eight, whose father died from a tumour. He himself had suffered for many years from indigestion and constipation. Three years before admission his right eye was removed on account of a melanotic tumour growing from the choroid. Four months before his death he had pain in the right side of his abdomen, accompanied by nausea and retching, and in three months he lost a stone in weight. During life the liver dulness reached as high as the fifth rib, and his abdomen was occupied by a hard tumour, which extended almost as far as Poupart's ligament on the right side, whilst on the left side it reached the level of the anterior superior spine of the ilium. His temperature was never raised. The case was interesting as an example of the duration of this form of growth.—Sir WM. LAWRENCE described a case in which, three years after removal of a similar growth in the eye, the sarcoma recurred in the liver and pancreas; and another case in which he operated illustrated also the frequency with which these growths recurred in the liver.—Mr. SHATTOCK inquired as to the condition of the lymphatic glands.—Dr. DICKINSON said the liver tissue appeared to be quite destroyed. Had the amount of urea passed been estimated?—Mr. SHEILD said that with a small primary growth there had often been noted extensive infection of glands and viscera. This rendered a careful systemic examination necessary before operating.—Dr. GOODHART asked if there had been jaundice or other symptoms of suppression of the liver function.—Mr. HUTCHINSON, jun., saw no value in the rule Dr. Moore had laid down that the duration of these cases was three years. Cases which had been operated on should be separated from those which had not. If the eye were excised before the sclerotic was penetrated complete recovery was possible.—Mr. SPENCER inquired as to the condition of the liver cells between the melanotic growths.—Dr. DICKINSON asked if the gall-bladder and bile ducts were normal.—Dr. MOORE said, in reply, that he had found the liver cells between the growths natural. There was some bile in the gall-bladder, and the patient was not jaundiced. He scarcely complained of pain, his discomfort being due to the large size of the abdominal tumour. The urine was of normal appearance. He thought that there was a difference between those cases beginning in the skin and those commencing in the eye, the latter being of longer duration.

Dr. PITT showed specimens of extensive Sessile Lymphadenoid Growths in the Mucous Membrane of the Stomach, most marked at the cardiac end. One of them was an inch thick and two inches across. The pyloric end of the stomach was free from growth, while the commencement of the duodenum was densely covered; thus the distribution was exactly the reverse of that met with in carcinoma. The small intestine contained thousands of small growths in the solitary follicles, the size of small marbles. Peyer's patches were much enlarged. The vermiform appendix formed a tumour the size of an orange, while a large mass of growth involved the ilio-cæcal valve. The clinical history of the case was that of dyspnœa and cough in a man aged forty-eight, due to the pressure of a gland on the bronchus, followed by empyema, and at no time was his abdominal condition suspected. Dr. Pitt divided cases of lymphadenoma of the intestine into two great groups. First, those in which the growth commenced in the mucous coat, where lymphoid tissue was abundant, especially in the solitary and agminated follicles, the ilio-cæcal valve, and the vermiform appendix. These did not usually ulcerate, and they rarely affected the calibre of the bowel.

They corresponded to the lymphoid tissue and lymphatics of the mucous and submucous coats. The second group consisted of those cases in which the growth had especially affected the mesenteric and retro-peritoneal glands, often forming an abdominal tumour, and thence had spread round the intestine in the subserous coat, forming a hard ring, which growth often infiltrated the muscular coat, caused it to yield, and hence the calibre of the bowel was dilated, as Dr. Moxon long ago pointed out. The mucous surface was often ulcerated, and the distribution was not that of the lymphoid follicles. Diarrhœa was a prominent symptom in these cases. Only seven or eight cases were recorded of the first group, of which one brought by Dr. Carrington before the Pathological Society in 1884 was very similar to the present. The second group were rather more common, but only about the same number appeared to be recorded.—Dr. MOORE referred to a case which he had met with at St. Bartholomew's Hospital which would come under Dr. Pitt's first group. Peyer's patches stood out like excessively exaggerated typhoid infiltration. Cases of the second group often gave rise to abdominal tumours difficult of diagnosis.—Dr. DICKINSON related a case in which a bronchus was almost occluded by a gland, in which the dyspnœa was excessive.—Dr. PITT stated, in reply, that the man had evidence of the compression of the bronchus for three months before he died; the dyspnœa came on gradually, and was not extreme.

Mr. D'ARCY POWER showed several specimens of Talipes. He observed that comparatively few observers had been able to dissect feet which during life had been affected with the various forms of talipes. The preparations shown bore out the observations made by Messrs. Parker and Shattock on the etiology and pathology of club-foot. The first two specimens were the feet of a newly-born infant at full term, which had well-marked talipes varus. The bones of the right foot had been disarticulated to show the modifications which they had undergone as the result of the congenital deformity. The third and fourth specimens were taken from a somewhat older child, affected with severe equinus. The skin and muscles had been stripped off one of the feet, and the deformity still remained. This seemed to show that it was maintained almost entirely by the ligamentous structures which immediately surrounded the joint. The next two specimens were a left foot affected with talipes varus, and a right in a condition of slight talipes calcaneus. Another specimen was the right foot and leg from a boy aged fourteen, who had long-standing disease of his right knee, with double talipes equino-varus, cavus, and clawed toes. The trouble in the feet was said to have begun when he was six years old. A minute description of the altered condition of the bones and of the arrangement of the tendons and ligaments was given.—Mr. W. ADAMS said that in an early number of the Society's Transactions he had shown that there was a very considerable deviation in the shape of the bones at birth; the astragalus showed great obliquity of its neck and a double articular process on its inner side. He thought the condition arose from intra-muscular uterine contractions occurring during the fourth or fifth month of uterine life. The deformity could not be explained by simple mechanical pressure.—Mr. R. W. PARKER, in discussing the cause of this condition, said that the obliquity of the astragalus was not the essential feature, for not only had they found a foot with typical deformity and a quite normal astragalus, but the condition of the astragalus of the adult ape was like that usually seen in feet with talipes, but the ape did not present talipes. The deformity was due to purely mechanical causes; equino-varus was the natural position of rest in chloroform narcosis and in deep sleep. The changes in the bones and ligaments made speedy cure impossible.

Mr. SYDNEY JONES showed a large tumour removed from Scarpa's triangle. The patient was a man, aged thirty-five, who five years and a half ago first noticed a growth as large as a chestnut which had since been gradually growing; it was tapped at Salisbury Infirmary and clear fluid withdrawn; in four weeks more fluid, this time blood-stained, was evacuated. It was painless, but as its bulk and position interfered with the patient's occupation it was removed. The femoral artery and vein and the internal saphenous vein required ligature and division. There was some coldness of the limb for the first twenty-four hours after the operation, then heat returned and no bad symptom resulted. The tumour was hollow, with thick dense walls, and nodules on its exterior of more recent growth; it was not connected with the psoas tendon. Microscopically, it showed fibrous tissue both well developed and embryonic. It seemed to resemble what the French writers had called "adeno-lymphocele." The fluid contained in the cyst was clear and straw-coloured.—Mr. ROGER WILLIAMS suggested that the growth was a myxoma, and this was one of its commonest seats.—Mr. SOLLY thought it was a fibroma or fibro-sarcoma, and not a myxoma; the lining membrane resembled that of chronic bursal tumours. — Mr. JONES said that ten days after the operation there was a little œdema of the leg, which speedily passed off; this was the only sign of inconvenience that followed ligature of the veins.

Dr. GULLIVER showed a specimen of a Caseating Gland projecting in the trachea above the right bronchus. There was a circular aperture, with well-defined edges, filled up by a mass the size of a hazel-nut, which turned out to be the caseated centre of a gland situated outside the trachea. There were two or three small yellow tubercles in the lungs near the root, otherwise the body was healthy. The symptoms were those of urgent expiratory dyspnœa, which got suddenly much better, but was followed later by a fatal attack. The first attack of dyspnœa he attributed to the development of an abscess, which subsequently burst, and this was followed by sudden relief; whilst the second was due to the blocking of the bronchus by the caseous gland. Cases had been recorded by Drs. Coupland, Gee, and Goodhart.—Mr. D'ARCY POWER had met with an almost similar case, where a woman coughed up a gland, and nine months later a cicatrix was found in the trachea.

The following card specimens were shown:—

Dr. PENROSE: (1) Thoracic Aneurysm Bursting into the Œsophagus; (2) Syphilitic Liver.

MEDICAL SOCIETY OF LONDON.

Median Harelip. — Auto-laryngeal Operation. — Facial Disfigurement. — Multiple Exostoses. — Solid Facial Œdema. — Raynaud's Disease. — Graves's Disease. — Muscular Atrophy, with Tremors. — Hallux Rigidus.

AN ordinary meeting of this Society was held on March 18th, Dr. Theodore Williams being in the chair. The evening was a "clinical" one, and devoted entirely to the exhibition and discussion of cases.

Mr. BERNARD PITTS showed a case of Median Harelip, from the Great Ormond-street Hospital, in a boy aged five months; there was no other deformity in the family. The cleft was quite median, extending half-way to the nose; the pre-maxilla was centrally grooved, but the bone was otherwise perfect. There was no cleft in the palate. A small tubercle was to be observed at the extremity of the lip

cleft. The condition was extremely rare; indeed, Fergusson and Dupuytren denied its possibility. Bland Sutton had described a case in THE LANCET of Feb. 18th, 1888, in which the pre-maxilla was absent. The condition was due to failure of junction of the two globular processes of His. (See engraving.)

Mr. GEORGE STOKER related a case of Auto-laryngeal operation. The patient at the age of seven lost his voice; a year later he was treated for a severe cold. He was then under a laryngologist for four years, and warts were diagnosed. A soft sponge on a stick was passed up and down the larynx, and he had a hundred such operations. Later, he was treated homœopathically by the constant current without effect. He then went to a special hospital, and was operated on every week for a hundred weeks with forceps and cautery; he, however, was only able to

vocalise slightly. Next he placed himself under the care of a distinguished laryngologist, who in five years performed 120 operations, pulling the growths away with forceps and burning them with the cautery. The voice during this time occasionally returned. Being then exhausted as to his pocket, and not cured, he designed and made a number of ingenious instruments (which were shown) and operated on himself, applying first acetic and chromic acid, and then cutting away the softened growths. For the past two years he had operated on himself on an average once a fortnight. He lay on his back, placed a mirror with a good light above him, supported his arms on a table placed on each side, and with the left hand held the laryngeal mirror, whilst with the right he performed the necessary manipulations. On several occasions profuse hæmorrhage had followed these operations. The growths were multiple papillomata, growing on and below the anterior commissure as low as the lower border of the cricoid cartilage.—Dr. SCANES SPICER remarked on the completeness with which the patient had removed the multiple sessile growths.

Mr. HAYMAN described and showed a case of Facial Disfigurement, in which he had supplied an obturator with an artificial cheek and eye. The patient, a man aged forty-six, noticed proptosis of the right eye two years ago, with swelling of the corresponding side of the nose; the swelling increased for six months; he was then operated on by Mr. Board at Bristol, who removed the supra-maxilla, leaving the floor of the orbit. Recurrence took place after healing, and in six months a second removal was effected. Six weeks after this a swelling formed below the right eye, and in six months it had grown to the size of an orange, was of dark colour, and discharged blood and pus. Mr. Morris, at Middlesex Hospital, then removed the tumour and the eye, leaving a large chasm, the roof of which was formed by the roof of the orbit, its inner wall by the septum of the nose, and its outer wall by the outer wall of the orbit, pterygoid processes, and ascending ramus of the lower jaw. The floor was formed by the tongue and a portion of the soft palate, which was left intact. Posteriorly, it communicated with the pharynx by a wide opening, in which, behind the posterior edge of the nasal septum, the trumpet-shaped orifice of the Eustachian tube of the sound side was fully exposed to view, and which could be seen to open and close when the patient swallowed. An artificial appliance had been made, which enabled him to speak and eat with comfort, and at the same time gave him a presentable appearance. An obturator was adapted with some difficulty, as one side of the palate had been removed; and a silver dental alloy plate was accurately adapted to the face, fitting under the right ala of the nose; finally, an artificial cheek and eye were moulded, and the whole was kept in position by a strong wire passing round the right ear and by a pair of spectacles soldered on to the nose-piece. The eye and face were painted and japanned, and the effect was very good, the patient being not only of presentable appearance, but being able to eat and speak with comparative comfort.—Mr. BERNARD PITTS was recently consulted in a somewhat similar case, where there was a slowly growing sarcoma of the superior maxilla, extending into the pharynx and involving both nares.

Mr. BRUCE CLARKE showed a man aged twenty-one, who was affected with Multiple Exostoses. His father and brother also had a few exostoses, which had given rise to no trouble. In April, 1886, several growths had been removed from the neighbourhood of the knee-joint. They were composed of cancellous tissue capped with cartilage. During the following month, and in July, 1887, more growths were removed, as they interfered with walking. At the present time the patient had become so crippled that he could only totter feebly. All the bones, except those of the skull, appeared to be affected, and an outgrowth from the posterior surface of his sternum interfered with his swallowing. The greatest growth was about the knees, which were so deformed as to be almost unrecognisable. The larger tumours gave rise to considerable aching pain, which became aggravated by handling. Quite recently there had been failure of vision in the left eye.

Dr. BEEVOR exhibited a case of Œdema of the Face following Erysipelas, which occurred in a girl fifteen years of age. She had her first attack of erysipelas when aged eleven, and three months later the swelling of the face was marked; she was also said to suffer from congestion of the kidneys. The following year she had a second attack of erysipelas, and the face then swelled up to its present size. It was a stagnant œdema, which varied considerably in amount from time to time; there was no albuminuria and no pitting of the affected tissues on pressure.

Dr. BEEVOR likewise showed a girl aged eighteen, the subject of commencing Raynaud's Disease. For six weeks she had pain in the left ear, which turned black, and these attacks of pain and discolouration recurred from day to day. Latterly the right ear had become similarly affected, and a patch over the left tendo Achillis turned of dusky colour, and there was slight loss of sensation over it. The patient was chlorotic. The blood had not been examined. He intended to adopt a ferruginous tonic treatment.

Dr. TAYLOR exhibited for Dr. Hughlings Jackson a case of Graves's Disease. The patient was a girl of fifteen. All the usual signs of the affection were well marked, and, in addition, there was a fine tremor of the hands, such as had been described by Charcot. Signs of congenital syphilis were present, there being mercurial teeth and complete absence of uvula, which was represented by a stellate cicatrix.—Dr. THEODORE WILLIAMS remarked that though the eyes were so prominent, yet the patient could close them. There was a loud basic cardiac murmur.—Mr. GEORGE STOKER advocated treatment of these cases by iodide of potassium and the constant current; he had likewise seen benefit follow division of the isthmus, and Kocher had recorded some such cases.—Dr. TAYLOR, in reply, said that during sleep the eyes of this patient usually remained an eighth of an inch open. Treatment by an electrical method of four acts had been recommended, and details of several successful cases had been placed on record.

Dr. TAYLOR also showed for Dr. Jackson a case of Muscular Atrophy with Tremors. The left triceps, extensor carpi ulnaris, and extensor communis digitorum were atrophied and completely absent, and all the muscles of this limb were wasted. The small muscles of the thumb were much diminished in size, though faradaic contractility remained. The biceps, the lower half of the pectoralis major, the deltoid, and the latissimus dorsi were wasted, and the opposite arm was getting weaker. The disease commenced with contraction of the little finger. The tremor which was present was well marked, and varied in degree and character; it was worse on excitement.—Dr. STRETCH DOWSE asked if there were any special nerve history, and if there had been any accident previously.—Dr. BEEVOR pointed out the curious way in which the affected muscles had been picked out; the biceps and deltoid were usually first affected. The triceps, lower half of pectoralis major and latissimus dorsi he had before seen affected together; these were chiefly supplied by the seventh and eighth cervical nerve roots, whereas the deltoid, biceps, and supinator longus were supplied by the fifth and sixth.—Mr. TAYLOR, in reply, said the patient's mother had suffered from tremor. He was a soldier, and had had syphilis, gonorrhœa, chancroids, cholera, and ague, and confessed to alcoholic excess. Since his discharge from the army he had acted as a porter.

Mr. EDMUND OWEN showed a telegraph boy, aged seventeen, affected with Hallux Rigidus associated with Flat-foot; it prevented him carrying on his occupation, and it occasionally bent down into the sole, forming hallux flexus. Various operations had been proposed for this condition, such as partial excision of the phalanx, forcible flexion under ether, and division of the inner portion of the plantar fascia. Gymnastics had also been suggested. He proposed to build up a high sole and heel on the inner side of the foot.—Mr. HOLM advocated purely gymnastic treatment for such cases. In the Swedish army recruits were not rejected outright for flat-foot, but a system of gymnastics was first tried, and a certain percentage cured by this means.—Mr. WATSON CHEYNE had recently treated a case of hallux rigidus with success by partially excising the proximal end of the phalanx.

OBSTETRICAL SOCIETY OF LONDON.

President's Address.—Relation between Chlorosis and Menstruation.

A MEETING of this Society was held on Wednesday, March 6th, Dr. A. L. Galabin, President, in the chair.

Mr. DORAN exhibited Dentigerous Bony Plates from a Dermoid Ovarian Tumour.

The PRESIDENT delivered his inaugural address, in which he spoke of the present condition of obstetrics and gynæco-

logy. He first dwelt upon the prosperous state of the Obstetrical Society. During the past four years its funds had increased by £600. Its Transactions and the work done at its meetings had steadily risen in quality and interest. Of the two branches of medical science with which the Society had to deal midwifery had for many years advanced the further towards scientific perfection. Germany had taken the lead in the great improvements in Cæsarean section. Six years ago the mortality after this operation was as high as from 70 to 90 per cent. Under the new method, as practised at Dresden and Leipsic, the entire mortality was but 9 per cent.; and including operations performed outside those cities, the mortality was not higher than 14·8 per cent. Whilst Germany must claim the credit for those triumphs which rendered craniotomy almost, though not entirely, needless and unjustifiable, British skill and science had gained much in the field of extra-uterine gestation. Operation at the time of rupture, or later, was now performed with increasingly encouraging results. Where the fœtus was found free among the intestines, or covered only with a thin amnion, the risk from decomposition of the placenta, if not from hæmorrhage, must always remain great. The results of faradisation, to kill the embryo, were questionable; most satisfactory in the history of midwifery was the application of antiseptics. Once the most miserable hovel was held to be less perilous to the parturient woman than the most palatial lying-in hospital. Now the mortality of childbirth had been reduced in some hospitals to 4 or 5 per 1000. The President then noted that, at the end of the last century, mortality in lying-in institutions had fallen very low, but this satisfactory state of things was not maintained nor restored till very recently. The majority of deaths were still due to puerperal fever, and in relation to that disease were many obscure points. The character of microbes in relation to the organs concerned in parturition was then discussed. The most efficacious antiseptic was a 1 in 1000 solution of perchloride of mercury. A concentrated solution made with a little glycerine and dilute hydrochloric acid in distilled water was convenient to carry about and far more reliable than tablets or powders. The President was in favour of the routine use of vaginal douches after labour; but where there was no skilled nursing, carbolic acid or some antiseptic less dangerous than sublimate was advisable. The President, after dwelling on further questions in relation to puerperal fever and childbed mortality, concluded that the principle of antiseptic midwifery was the prevention of the entrance of virulent germs, rather than the destruction of microbes already in the genital tract. He congratulated the Society upon a reform which had taken place in London and, he believed, in the provinces also, namely, the removal of restrictions upon the performance of abdominal operations by obstetric physicians. Lastly, he spoke of diseases which were yet obscure and must be studied pathologically, such as endometritis, chronic metritis, and ovarian pain in relation to oöphoritis; and the distinction between normal and pathological dilatation or atrophy of the Graafian follicles should be carefully made.

For this inaugural address a vote of thanks was proposed by Dr. Matthews Duncan, seconded by Dr. Grailly Hewitt, and carried unanimously.

Dr. W. STEPHENSON, Professor of Midwifery, University of Aberdeen, read a paper on the Relation between Chlorosis and Menstruation; an analysis of 232 cases. The author observed that in the rapid progress of uterine specialism, chlorosis in its relation to menstruation had been too much neglected by the gynæcologist. The 232 cases were divided into two groups: (1) where the illness was primary and occurred before the twenty-third year, comprising 183 cases; (2) where the attacks were of the nature of relapses after a period of good health (forty-nine cases). Chlorosis was regarded as due to a constitutional state; but the diathesis was not necessarily associated with an impairment of the development of the body, and was not, to any marked degree, connected with defective health previously to the onset of the disease. The influence of the chlorotic constitution on menstruation before chlorosis sets in was first discussed. Tables were given to show that the tendency of the chlorotic diathesis is to accelerate the age at which menstruation first appears, and that chlorosis by itself is not a cause of retarded appearance of the catamenia. At the same time, in one-half of the cases, the functional activity is defective, and is chiefly characterised by lengthening and irregularity of the intervals and scantiness in the amount of the flow. The author's statistics were against the opinion that there is a menorrhagic form of chlorosis. In 96·6 per cent. the effect was to diminish the activity of the function, the remaining fraction being complicated with ovarian irritation. In 58·7 per cent. menstruation became scanty and irregular, and in many cases painful, while in 37·8 per cent. there was amenorrhœa for various periods. A table was given to show that there are two marked chlorotic periods: the one, of primary attacks, from the age of fourteen to twenty-one; the other, of secondary attacks, from twenty-four to thirty-one. The number of cases of the disease presents a regular curve, beginning at the age of fourteen and rising steadily to a maximum between eighteen and nineteen, then rapidly falling, to disappear altogether at twenty-two. The tendency to secondary attacks manifests itself first at the age of twenty-four, rises to a maximum between twenty-six and twenty-eight, to again disappear at thirty-two. That there may be a third period is probable, as two cases were recorded at the ages of thirty-nine and forty-one. This law applies to attacks of the disease with distinct intervals of good health between, as distinguised from the simple relapses, after periods of imperfect convalescence, frequently met with after a primary attack. The curve of menstrual age, compared with the curve of the onset of chlorosis, does not bear out the opinion that "foremost in etiological importance is the period of the first appearance of the catamenia." The fact of a periodicity in the attacks is also against it. The cause of this periodicity was considered, and the general conclusion arrived at is that imperfect evolution of menstruation, as evidenced by scantiness of the flow and irregularity of the periods, is as regular a feature of chlorosis as the imperfect evolution of the red corpuscles of the blood. These constants were independent one of the other, though a close relationship existed between them whereby the reproduction and development of the red corpuscles of the blood were governed by, or form part of, the menstrual cycle; while both were influenced by a greater rhythmic action which determines the time and activity of development, growth, and reproduction.

Dr. JOHN PHILLIPS observed that in chlorosis the average hæmoglobin richness per corpuscle was much reduced. In anæmia there was almost total abolition of corpuscle-formation, or very little power of hæmoglobin absorption. In chlorosis iron was always beneficial if not absolutely curative. In anæmia it was harmful, but great improvement often followed the administration of arsenic. He wished that the Society could be informed whether the blood was examined in Dr. Stephenson's patients.—Dr. LEITH NAPIER strongly supported the opinion that chlorosis depended upon climate to a certain extent. He had found it far more frequent in Aberdeenshire than in the south of Scotland. The rarity of the coincidence of chlorosis and tuberculosis was an important fact. Sir Andrew Clark's doctrine as to the retention of fæces and production of ptomaines and leucomaines in the blood was not universally applicable. Blaud's pills were very useful, but Dr. Napier preferred a mixture of iron filings, cream of tartar, and liquorice powder in equal parts; as much of the powder as would cover a shilling should be given daily.—Dr. CLAPHAM could not agree with Dr. Stephenson's opinion that experience showed that there was no menorrhagic form of chlorosis. He had seen that form in a girl aged eighteen. The hæmorrhage was very severe on one occasion, and was only checked by the application of a solution of perchloride of iron to the interior of the uterus.—Mr. ALBAN DORAN remembered a similar case in Dr. Routh's wards at the Samaritan Hospital. The patient was sixteen, and had been subject to chlorosis and very scanty menstruation for over a year. Profuse uterine hæmorrhage killed her, though local treatment and transfusion were tried. The ovaries contained very few follicles. No special morbid appearances could be detected in the uterus or tubes; the vessels of the uterine walls showed none of the changes observed by Dr. Percy Kidd in hæmophilia.—Dr. RUTHERFORD wondered whether a family history of chlorosis was present in any of Dr. Stephenson's patients. He had seen menorrhagia in two sisters suffering from chlorosis. He noted that chlorosis occurred at or about the "dodging time." He believed that the disease was primarily neurotic.—Dr. ROUTH stated that his case already noted was an instance of true menorrhagic chlorosis. He had maintained, many years ago, at the Medical Society, that a blood poison was present in chlorosis with amenorrhœa. The skin assumed the

colour seen in many blood-poisoning diseases. The poison might be some ptomaine formed in the body. Fæcal absorption, which Dr. Routh had shown to be fæcal fermentation, might explain the phenomena perfectly. It produced the chlorotic complexion, sometimes in males. Free purgation often cured chlorosis, as Hamilton had shown long ago. A neurotic dyspepsia was seen in certain cases; this complication Dr. Routh had cured by Apostoli's practice of applying the continuous current to the pneumogastrics in the neck. Then the patients could digest their food, arsenic, and iron, and free purgation completed the cure.—Dr. PLAYFAIR had seen severe cases of menorrhagic chlorosis. He doubted whether any chlorotic diathesis existed. Dr. Stephenson's theory of climatic influences was reasonable; he noted the frequency of chlorosis in Aberdeen, and Dr. Playfair had been struck by the number of cases which had come to him from Australia. Overwork should have been named as a certain cause. Chlorosis was common in high-class girls' schools, generally beginning after menstruation had been established. Profound impairment of nutrition was probably the basis and essence of the disease. In many cases there was a neurotic element. The nutrition must be improved. Bland's pills, so strongly recommended by Dr. Stephenson, represented an admirable way of administering iron, but they were no panacea. Dr. Playfair had never failed to cure cases of chlorosis of the worst type by systematic rest, massage, and over-feeding.—Dr. GRAILY HEWITT believed that the fundamental condition in cases of chlorosis was imperfect and inadequate nutrition, not uncommon even in the higher grades of society. Hence the main object in treatment was to restore nutritional activity. As medicines, mild aperients and iron were required.—Dr. MALINS then made some observations.—Dr. T. C. HAYES traced the symptoms of chlorosis to blood changes, the corpuscles being affected and iron deficient. Iron taken in sufficiently large doses for a certain time cured the disease. He had never seen menorrhagia with true chlorosis. Married women might be anæmic, but he had never known true chlorosis to set in for the first time after marriage.—Dr. DYCE BROWN traced chlorosis to some functional disorder of nerve centres. Malnutrition was not constant; some chlorotic patients were fat. Iron did harm when the temperature was the least above normal. In such cases arsenic, especially the iodide, was of value. Pulsatilla, no new remedy, was also of great benefit.—Dr. HEYWOOD SMITH referred to Dr. Stephenson's argument by analogy from the chlorophyll of plants to the hæmoglobulin of the human subject as illustrating the blanching in cases of chlorosis. He drew attention to the blanching of the majority of old people who had passed the age of sexual activity.—Dr. HORROCKS insisted on distinguishing chlorosis, so generally associated with amenorrhœa, from the anæmia caused by loss of blood, where the menses were not always diminished. The cessation of menses was a good thing for the patient as long as she remained weak and pale from the disease itself. Iron was good. Dr. Horrocks preferred the powdered saccharated carbonate.

ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND.

THIS Society finds itself so well provided with communications that on March 6th an extra meeting was held at Guy's Hospital, in the Court-room, the President of the Society, Professor Humphry, being in the chair. Professor Macalister, of Cambridge, after explaining what need there was for accurate information, proposed that a committee of the Society should be formed to carry out a plan of collective investigation of anatomical variations, and it was arranged that the committee of management should report upon the idea to the next meeting. Professor Macalister also drew attention to the circumstance that the Anatomy Acts did not provide for the utilisation of unclaimed bodies. A discussion followed, from which it appeared that the country anatomists could do with a better supply, and their claims were ably advocated by both the reader of the paper and by Mr. Thomson of Oxford. Professor Howes and Dr. Bowles, of Folkestone, then communicated papers on a question which has of late received great attention—namely, the intranarial epiglottis. The last-named gentleman brought a most interesting series of specimens from pigs and sheep to show the way the epiglottis projects behind the soft palate into the posterior nares; indeed, he seemed disposed to argue that in consequence of this arrangement, pigs were unable to breathe properly through the mouth. Messrs. Howard, Sutton, and Macalister joined in the discussion which followed, and the subject was pronounced to be of unusual interest and ripe for further elucidation. Finally, Mr. Gordon Brodie read a paper upon the ligaments around the shoulder, which elicited some interesting remarks from the President and from Professor Macalister. The next meeting was announced to be held on May 30th, at the Inns of Court Hotel, after which occasion the Society will entertain its President at dinner.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of this Association took place at the Retreat, York, on Thursday, March 14th, under the presidency of Dr. Clouston, of Morningside, Edinburgh.

Dr. CLIFFORD ALLBUTT read a paper on the Insanity of Children, as distinguished from Idiocy and Mental Weakness. He pointed out that the form of the insanity depended on the degree of mental development, and that as the infant was all movement, so the insane infant was all restless action. The older child was more affectively insane. There was a want of method and reflexion in all the mental disorders of children. Suicide, and even homicide, might occur, but they were impulsive, thoughtless acts, suicide seeming to be the only door open for escape from what appeared to be a serious calamity to the child. Dr. Allbutt gave a more favourable opinion of such cases than is commonly held.—The PRESIDENT referred to delirium arising in neurotic children with very slight bodily cause.—Drs. Beach, Savage, and others also spoke.

Dr. BAKER, of the Retreat, read a paper on Ten Years' Experience of the Turkish Bath in the Treatment of Mental Disorders. He demonstrated its use in all cases of blood pollution, such as alcoholism and the chloral and morphia habit, as well as in cases of mental weakness due to gout or similar causes. In defective excretion, in hepatic congestion, and the like, the bath is invaluable; it assists convalescence, as after puerperal insanity, and quiets and relieves even in epilepsy and chronic insanity. Besides all this, it acts as a tonic for the medical officers and the general staff. The opinion of those who have tried it, among medical officers of asylums, was strongly in its favour as a rapid and easy way of washing patients, as well as for medical treatment.

A paper by Dr. WATSON was read on the Use of Sulphonal, and Dr. Percy Smith contributed his experience at Bethlem. The result seemed to be that this drug was useful and harmless, one drawback being its insolubility. Dr. Yellowlees had seen giddiness produced by it.

The record of a case of attempted suicide was given by Dr. URQUHART.

In the evening the members and their friends dined together, and the chairman, Dr. Clouston, spoke fully of the present, past, and future of lunacy, showing how much of the humane treatment of the insane had its origin at the Retreat, York, under the direction of the great-grandfather of Dr. Hack Tuke.

On Friday a visit was paid to the new asylum for the West Riding at Menston. This asylum has cost £240,000, and is of very substantial construction, with all the newest improvements.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Epithelioma of the Tongue.—Aneurysm of Sinus of Valsalva.—Endothelioma of the Liver.—Intra-thoracic Sarcoma.—Rhinolith.

A MEETING of the Pathological Section was held on Jan. 11th.

Dr. SCOTT read a paper by Mr. Corley (who was unable to be present in consequence of illness) on Epithelioma of the Tongue.—Dr. GRAVES stated that Herr E. Sänger had made 200 experiments with different forms of cancer, and had been unable to get any bacteria at all in connexion with them.—The PRESIDENT said it would be recollected that Dr. Charles Ball laid before the Section three specimens of warts that grew on the hands of persons employed in tar and petroleum works in Dublin, and which were followed by epitheliomatous change.—Mr. WHEELER, who submitted

a case of lingual tumour, said he was so convinced that syphilitic deposits were fertile sources of cancer that even where he was perfectly certain that there was no cancerous deposit, infiltration, or contamination whatever in a syphilitic sore, if the change was of comparatively long standing he would excise; and he believed, in the case of syphilitic deposits, that the change was not due to local irritation, but to the destruction of the tissues by the deposit.

Dr. C. J. NIXON exhibited a specimen in which an Aneurysm the size of a small walnut was found engaging the left Anterior Sinus of Valsalva. The walls of the aneurysm were formed by the valve-segment and thickened endocardium internally, externally by the epicardium, and below by the muscular wall of the left ventricle, part of which was eroded. The sac of the aneurysm opened into the cavity of the ventricle, so permitting aortic inadequacy. From the opening in the sac of the aneurysm a portion of fibrin projected, which, lying against the anterior flap of the mitral valve, caused a perforation of it the size of a good-sized pea. This opening was of interest in connexion with the sign of mitral regurgitation which existed during life. There had also been signs of aortic inadequacy. Dr. Nixon dwelt upon the different forms of cardiac aneurysm and their modes of production. — The PRESIDENT said he had shown for the late Dr. Stokes, years ago, at the Pathological Society, an aneurysm of the sinus of Valsalva, but it differed from Dr. Nixon's case. Dr. Stokes showed a case at the old Pathological Society in which the aneurysm communicated with the conus arteriosus and the pulmonary artery, the situation being, so far, very close to that in Dr. Nixon's case; but then it passed forwards to the left side of the conus arteriosus, and made an aneurysm between the two sides of the heart.—Dr. NIXON, in reply, said he could not conceive any physical sign, or combination of physical signs, that would enable a diagnosis to be made of an aneurysm involving the sinus of Valsalva. Dr. Hayden thought there was a sign which was of value in diagnosing aneurysm of the aorta immediately above the sinus of Valsalva—namely, a clear ringing aortic second sound, having a marked character of accentuation, followed by a post-diastolic murmur.

Dr. M'KEE read a paper on a case of Endothelioma of the Liver, and showed microscopic preparations and drawings. The growth, consisting of small nodular tumours, had originated in the endothelium of the capillaries and small veins. Attention was called to the extreme rarity, if not unique nature, of the case.

Dr. JAS. LITTLE presented a case of Intra-thoracic Sarcoma, probably originating in the mediastinum, and involving the upper lobe of the right lung.—Dr. NIXON did not think there were sufficient grounds for being dogmatic as to a difference in the mental condition of patients suffering from cancer of the mediastinum and thoracic aneurysm respectively.

Mr. M'WEENEY showed a Rhinolith weighing 105 grains. It had been extracted without much difficulty from the nasal fossa of a woman aged about forty-five. The presence of so large a foreign body had caused very little inconvenience beyond the stopping of respiration through the affected side of the nose. Mr. M'Weeney called attention to the rarity of such specimens, and to the brevity and unsatisfactory character of the references to the subject in most of the surgical and pathological text-books. The specimen was sent to the Reference Committee.

Notices of Books.

The Operative Treatment of the Hypertrophied Prostate. By FRANCIS SEDGWICK WATSON, M.D., Surgeon to Out-patients, Boston City Hospital; Surgeon to the Department of Genito-urinary Surgery, Boston Dispensary; Instructor in Minor Surgery and the Surgery of the Urinary Organs, Harvard Medical School. Boston: Cupples and Hurd. 1888.—This is a paper which was read at the Congress of American Physicians and Surgeons in Washington last year. It is written to show that in cases of advanced prostatic disease with severe symptoms, which are not relieved by the usual treatment an attempt should be made to remove the obstruction to micturition by a free division or removal of the enlarged middle lobe of the prostate. Dr. Watson maintains that the palliative treatment of these cases—supra-pubic or perineal drainage—is more dangerous and less successful than the radical operation he recommends, and that the examination of pathological specimens demonstrates the possibility of a radical operation. Should operation be decided upon, the perineal method is advised, as being more generally applicable than the supra-pubic; division or excision of the middle lobe, followed by permanent drainage, are the procedures to be adopted. We cannot say that the paper impresses us as a thorough discussion of the subject, and we hardly think it likely greatly to influence professional opinion. The illustrations to the paper are excellent. They include twenty-four photogravures of bladders and prostates, which for accuracy and clearness we have never seen surpassed. They certainly form a most valuable addition to the text.

A Compend of Human Physiology, especially adapted for the use of Medical Students. By ALBERT P. BRUBAKER, A.M., M.D., Demonstrator of Physiology in the Jefferson Medical College, Philadelphia. Fourth Edition. Pp. 174.—*A Compend of the Diseases of the Eye, including Refraction and Surgical Operations.* By L. WEBSTER FOX, M.D., and GEORGE M. GOULD. Second Edition. Pp. 164. London and Edinburgh: Young J. Pentland. 1889.—These two neatly got up little works belong to the class of books named "Repetitoria" in Germany, and are intended to act as reminders to the student of the more important facts which must be given by every teacher. Considerable thought is required in the production of such manuals to determine, not so much what should be inserted as what should be excluded. It is not possible to compress the whole of physiology or of ophthalmology into the compass of less than 200 small pages. Still, in the hands of those who know their work well, it is surprising how much can be given in that space. In the "Physiology," we think an arterial pulse tracing and a muscle curve might have been introduced with advantage. The proportion of hydrochloric acid in gastric juice given (4·78 per 1000) seems high; perhaps it represents that of the dog. In the Compend on the Diseases of the Eye more space might be devoted to the symptoms of paralysis of muscles; for example, "Paralysis of the superior oblique supplied by the fourth nerve is detected by imperfect rotation downward and outward, causing diplopia and slight divergence." Such an account would not enable the student to recognise the affection, whereas a small figure giving the position of the true and false images of a candle would enable him to tell it at once. We say much for these two compends when we pronounce them to be equally good. Students will find both useful as supplements to larger works.

Zeitschrift für Biologie. Von W. KÜHNE und C. VOIT. Band XXV., Heft 3.—This part contains an article by William Martens on the Behaviour of Diphthongs and Vowels in Spoken Words, tending to support the statement of Wendeler that the graphic curves of spoken vowels show remarkable inequalities, whilst those of sung vowels are approximately uniform, and demonstrate that the pitch of spoken vowels is not exactly determinable by our ears. He agrees with Merkel that in the utterance of vowels and diphthongs three periods have to be distinguished: the initial period, the final, and the intermediate—"au," for example, commencing with broad *a* and passing gradually into *u*. Many tracings are given in a plate which accompanies the paper. 2. On the relations of Growth between the Body and the several Organs, by Dr. Carl Oppenheimer. 3. W. Kühne and R. H. Chittenden communicate a paper on Myosin and Myosinoses. They have found some new compounds in digesting these substances, to which they

have applied the names of Proto-myosinose and Deutero-myosinose. 4. R. H. Chittenden and A. S. Hart on Elastin and Elastose. As in the preceding paper, the effects of digestion have been followed, and Proto-elastin and Deutero-elastin obtained. 6. C. Weinland on the presence of Guanin in the Excretions of the Garden Spider. 7. E. Drechsel: Can the Gastric Mucous Membrane decompose Bromides and Iodides? His experiments do not solve the point. 8. M. Rubner: a Calorimeter for Physiological and Hygienic Purposes.

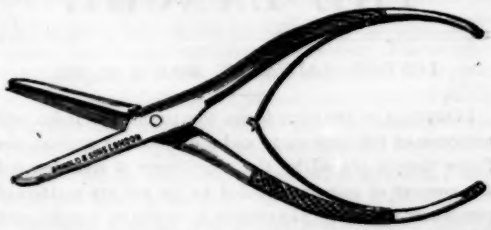
Archiv für Anatomie und Physiologie. (BRAUNE und DU BOIS REYMOND.) Hft. 1, 2: Anatomische und Physiologische Abtheilungen. 1889. — The anatomical part of this journal contains three articles: Bonnet on the Embryology of Ruminants; Darkschewitsch on the Superior Nucleus of the Third Nerve; and A. Alexander on the Lymph Sinuses of the Choroid. The physiological part contains: (1) Calorimetric Researches, by J. Rosenthal; (2) Margherita Traube-Mengarini on the Gas in the Swim Bladder of Fishes; (3) J. Rosenthal on Artificial Respiration; (4) Nicolaides on the Time-relations of the Muscle Current; (5) Lahousse on the Gases of Pepton Blood; (6) Gürber on the Total Number of the Blood-corpuscles and their Variation; (7) Observations on Living Glands, by Otto Drasch; (8) Ellenberger and Hofmeister on the Digestion of the Pig; (9) remarks on a case of Megalodactylia, by Alf. Goldschneider; (10) Course of Practical Physiology, by Hensen.

Minutes of the General Medical Council and its Committees for the Year 1888. With Four Appendices. Vol. XXV. London: Spottiswoode and Co., or Medical Council Office.—There has seldom been a volume of Minutes of the Medical Council containing more instructive and interesting matter than the present one. The ordinary business of the Council in 1888 involved some important questions, and included, if not new departures, some very far-reaching decisions as to the powers and functions of the Council. The volume contains, besides, the reports of the first Inspectors of the Final Examinations under the Act of 1886 and the answers of the bodies to the criticisms of the inspectors. Appendix I. contains the fourth statistical report on the number and distribution of registered medical practitioners in England and Wales in 1881 and 1886 respectively, the number and source of their qualifications, &c. It would be difficult to get in any other place and form data of such interest and accuracy, and we need not say they have not been compiled by the Council without much expense and trouble, especially on the part of the President and Registrar.

New Inventions.

NEW CLAMP SCISSORS.

AN instrument which will clamp as well as cut is a desideratum. The accompanying illustration represents such an instrument, which I think will be found of general use for the removal of abnormal outgrowths of small size, more especially those of a vascular nature. The flat side of the instrument being closely applied, with blades apart, to the surface from which growth is to be removed, the cutting must be effected *quickly, firmly, and with one blow*, when the remaining tissue will be found firmly clamped. It will be found advisable to leave the clamp on cut surfaces for a minute or two, when the handles can be partially released by letting go one of the catches, and any bleeding then noticed to be going on between the blades can be immediately controlled by pressing the handles together again and leaving the clamp on for a few moments longer, when all bleeding will be found to cease, and it can be removed for good. The following are a few of the purposes to which my clamp scissors can be applied: Removal of hæmorrhoids, enlarged uvula, vascular tumour of the meatus urinarius, warts, condylomata, circumcision in the infant, &c. The bow-shaped handles give great power, and the catch I consider a great improvement. It can be



released at once by a twisting movement of the thumb and fingers of the left hand from right to left. The makers are Messrs. Arnold and Sons, West Smithfield, who have carried out my ideas to my entire satisfaction.

Dublin. ALEXANDER DUKE, F.K.Q.C.P.I.

REFORM AT THE ROYAL COLLEGE OF SURGEONS.

To the Editors of THE LANCET.

SIRS,—It is with considerable pain that we note the letter of Mr. W. Horrocks, published in your issue of the 16th inst. It is a distinct libel upon the Fellows to have spoken of any of their number as "unruly," and upon the Members to describe their assemblies at the College or elsewhere as "brawls." We challenge Mr. Horrocks to lay his finger upon any proceeding that can come under that category. The order of the College meetings has been such as to favourably compare with that of many a legislative assembly, while on no occasion has the slightest attempt at disturbance arisen, though the Members have been made to smart at the hands of a Council who refuse to adopt the legitimate consequence of countless resolutions, passed by overwhelming majorities. In what way, for instance, was there any brawling at the historical meeting of the 28th ult.? A body of respectable, mostly middle-aged practitioners assembled outside the gates of the College, with the legal object of formally demanding admission to their own hall; the right of entry having been as formally denied, the Members and Fellows moved off, in order, to a previously appointed meeting-place, and there held, in peace and "decency," their bloodless counsel. For our own part, we may say that, were there ever to be exhibited any signs of rowdyism or "brawl"—a ridiculous assumption among a body entrusted with the lives of Her Majesty's subjects,—we should promptly endeavour to suppress such improper manifestations, and, failing that, should retire from a movement that had undergone so marvellous a change.

As to the sneers of Mr. Horrocks with regard to a "set of nonentities," &c., I presume that he will not describe Mr. Holmes, Dr. Danford Thomas, Dr. Macdonald, Sir Guyer Hunter, and Mr. Jabez Hogg as men totally unknown in professional circles. Nor will he class Mr. Pollock, Mr. Tweedy, Mr. Davy, and Mr. Lawson Tait as men who "lack the appreciation" of the general body of the College. It is scarcely by such amenities as the above cited, or by the showering of epithets such as "lazy" and "stupid," that Mr. Horrocks will advance the cause of the Council; nor will he gain a reputation for careful following of the course of modern history by quoting as a matter for congratulation the abortive attempt of Sir Spencer Wells to abolish the annual meeting of the College, an attempt which failed so signally even amongst the retrograde Members of the College Council. We shall be glad to hear Mr. Horrocks on a future occasion, when he has had the time to study a little more carefully the course of recent events, and has exercised the pruning knife upon his vocabulary.

We are, Sirs, your obedient servants,

WARWICK C. STEELE,
Florence-terrace, Ealing, W.,
WM. ASHTON ELLIS,
Grosvenor-road, S.W.,
Hon. Secs., Assoc. M.R.C.S.

March 20th, 1889.

*** Other letters on the same subject as the above have reached us, but we are unable to find space for them.—ED. L.

THE LANCET.

LONDON: SATURDAY, MARCH 23, 1889.

INASMUCH as literature forms the permanent index and reflection of the sentiments and convictions of nations, the figure therein played by the practitioner of medicine and the amount of respect accorded to his art are matters of permanent interest. The picture is, no doubt, various, and subject to the modifications which the exigencies of satire and burlesque from time to time demand; but there can be little dispute that the voice of literature is to-day, as never before, raised on behalf of the signal and indispensable services which medicine is rendering to humanity. If we take the Elizabethan dramatists in England, or MOLIÈRE in France, as accurate reflectors of popular opinion, we have some gauge of how far we have travelled since then. Who now will say with MASSINGER:

> "Out, ye impostors!
> Quack-salving, cheating mountebanks—your skill
> Is to make sound men sick, and sick men kill!"

Or it may be doubted whether any serious dramatists would now be found to pour such ridicule upon the profession as sparkles in the pages of MOLIÈRE, or whether the reading public could any longer see any humour in such *jeux d'esprit* as the remark of one of his characters—"Mon médecin m'ordonne des remèdes, je ne les fais point, et je guéris." It is true, one great modern writer—CARLYLE—has said as uncivil things about us as any of his predecessors, but readers of his life and works are at no loss to conjecture the secret of the Chelsea sage's antipathy to our art, nor are proofs wanting that this antipathy cost him and others dear. CARLYLE fiercely resented the interference with his freedom which medical advice entailed; he persisted in courses of work and diet which were inimical to health, and hence he has made his dyspepsia famous to all time at the cost of acute personal suffering and many domestic jars, which it is tolerably certain judicious medical direction would have palliated, if not wholly averted. But CARLYLE is an exception in this generation, and literature now breathes a reverence for science and a gratitude to that portion of it which is devoted to the relief of suffering and the cure of disease. Whence arises this change of sentiment? The causes will, we think, admit of tolerably precise statement.

Chief of these causes must be placed those momentous and epoch-making discoveries which the most frivolous of writers cannot ignore, or the most persistent of satirists deride. HARVEY, JENNER, SIMPSON, LISTER—where are the services to humanity which excel in significance and far-reaching consequences the discoveries associated with such names? The discovery of the circulation of the blood, of vaccination, of chloroform, of aseptic surgery—these are facts not only of supreme scientific interest, but, what is more to our present point, they are of a nature to rivet the attention and stir the heart of every thinking man and woman. They are both of immense present importance, and they open up vistas of possibilities for the future enough to stimulate the best intellects to the putting forth of their utmost powers. They are one of the grandest chapters in the wonderful story of the gradual victory of man over the forces of nature. The first gain, then, of medical science has been its positive advance, the increasing range of its discoveries, the widening area of its usefulness.

There has been a second gain, more negative in character, which a study of the old writers brings strikingly home to us. Medical science has been ridding itself of its defects, throwing off its shackles, lightening itself of all useless and burdensome *impedimenta*. The fault which former generations of dramatists and satirists most commonly alleged against our art was the practice of a meddlesome, nauseous, futile polypharmacy. The doctor of the middle ages is commonly represented as an ignorant apothecary, plying his patients with drugs either hurtful or inert; or, if the portrait is meant to be flattering, his chief business is described as that of distilling and administering secret and potent draughts and potions. BUTLER, in his "Hudibras," writes:

> "For men are brought to worse distresses
> By taking physic than diseases;
> And, therefore, commonly recover
> As soon as doctors give them over."

Here, again, is a portrait which, if presented to-day, would instinctively be felt to be an anachronism. No fault is further from the best medical practice of to-day than the indiscriminate administration of large quantities of imperfectly understood remedies. Our fault, if there be one, is rather the adoption of the precisely opposite point of view. We recognise that the natural course of the great majority of diseases is towards recovery, and that the effect of our remedies is less to cure disease in the strict sense than to remove obstacles to the performance of healthy function and to support the physical powers until the morbid processes run their course.

Without attempting to exhaust a large subject, we may indicate a third reason for the increased prestige of medical science—the wonderful advances of operative surgery in recent years, and the success which with modern methods now attends the most serious operations. Tell a sensible man that in one great operation — ovariotomy — the mortality has fallen in a quarter of a century from 90 to less than 10 per cent., and he will have little sympathy with us if we proceed to lament that our art has its limitations and disappointments. A broad fact like that just mentioned strikes the public mind, and produces a powerful and abiding impression upon public opinion which soon finds its utterance in literature. We might add other causes for the change in sentiment which we are discussing, such as the increasing definiteness and certainty in prognosis which is now possible. On the whole the outlook is encouraging. We may well take heart and courage, pledge ourselves anew to the investigation of nature and the relief of humanity, and take for our watchword the motto, *Sursum corda*.

NOTWITHSTANDING that the evil consequences of early marriage are on all hands admitted to be real, it is more than doubtful if the teachings of past experience on this point have been accepted beyond the sphere of their immediate action. It is, at all events, very evident that these

premature unions are still far too common. That this is the case we may gather from the terms of a resolution lately passed by the London Diocesan Conference, in which it was agreed that the evil had grown so great as to render necessary a reform in the existing marriage law. In the course of this discussion, the dangers, mental, moral, and physical, heedlessly incurred under present arrangements were commented on.

It is somewhat difficult to say under what aspect we may consider a subject so diverse in its relations. Prudence and social duty are as much offended as physiological rule by those who thus precipitately commit themselves, but we shall now consider their action chiefly in its bearing on physical health. The question whether the union of a couple between the age of puberty and adult life is necessarily disastrous could not of course be answered in the affirmative. As a matter of fact, however, such an answer has in many cases been justified by experience. Any body of statistics which might be brought to bear on this subject would certainly abound in seeming contradictions, and we should find in it a good many instances of apparently perfect success in matrimony as far as concerns the possession of a healthy progeny. Nor, perhaps, should we be able to discover on the part of the parents any noteworthy departure from the ordinary standard of physical or mental vigour. This is a case in which the effect of personal qualities and attendant circumstances would be more or less felt. The consequences of prematurity might be expected to show themselves, for example, in a more marked degree among persons accustomed to an over-refined and indolent life than among active individuals of simple habits and sound muscular fibre. The weakening influence would in the case of the latter be met, and perhaps counteracted, by healthy conditions. It might therefore be supposed that any wholesale denunciation of early marriage could only be defended by the insufficient evidence of special cases. Unfortunately for this argument, however, the injurious consequences which it aims at minimising become only the more evident in proportion to the breadth of our inquiries. Some remarks by Dr. MATTHEWS DUNCAN, in a clinical lecture which we print on another page, are important as conveying the results of recent investigation into the subject. It is a significant fact that this competent observer, in dealing with the causes of sterility and allied defects of the reproductive function, should assign the primary position to the age at which marriage takes place. The period at which fertility is not only surest in its occurrence, but safest and most happy in its results, is, he tells us, between twenty and twenty-five years for women, for men about five years later. On either side of this period the factors opposed to successful pregnancy are in the ascendant as compared with those which favour it, and this is particularly true of the stage of adolescence before the twentieth year. Some may be rather startled to hear that no female can be regarded as sexually mature until she is twenty, but no one will dispute the assertion if it be understood that assured safety in child-bearing, as far as that can be thus assured, is the true test of maturity. Under twenty, even more than in the epoch of post-maturity, there is a special tendency to the occurrence of the errors and accidents of pregnancy. Abortion, early death of the infant, and idiot birth are all disproportionately common among these premature mothers; and this fact is easily reconcilable with a degree of sexual development which, if it is in a sense complete, has often proved inadequate to any unusual strain, or even to efficient functional exercise. On the other hand, it may be urged that a frequent consequence of early marriage is excessive fertility. This no doubt implies vigour of a kind, yet it is abnormal. It is often, too, a process resembling the profuse early fruiting of plants. The offspring is abundant, but for this very reason it is also the less robust. Like the early and spurious fruit, it lives a feebler life in proportion to its abundance; and, like it, often fails to reach maturity. In the words of Dr. DUNCAN, "fecundity does its best in the production of healthy, long-lived offspring." This result, though not alone compatible with a marriage contracted within the period to which we have already referred, is indisputably more probable where the age of both parents approaches such an ideal. The social and economic difficulties connected with this question are not a whit less real than those we have been discussing. A youth, usually of the working class, at a time when his income is in its precarious infancy, must needs burden it with the costs of a household; and himself, probably also his wife, unformed in mind and under-educated, must become responsible for the training and so far the future of their children. There need be little surprise, in the circumstances, if we hear of children born physically unfit, and mentally and morally incapable of fulfilling the duties of life. The picture as drawn by some has perhaps been over-coloured. Let us grant that it has; there can still be no doubt that it is true in its essential features to the morbid life which it portrays. We may remind the members of the Conference of one remedy which is ready to their hand—namely, the personal influence of clergymen upon the marrying but unmarriageable poor in their parishes.

IT is a popular induction that extensive forests or plantations promote the depression of moisture in the atmosphere, and that the removal of such growths, whether by felling or conflagration, makes a region dry and unfruitful, while their judicious cultivation and tendence keeps up or even creates the fertilising rain-supply. Of late years this view has been disputed, and at the present moment there is a controversy being carried on, mainly between German and American climatologists, as to whether it has any foundation in fact—whether it is not, like some other popular inductions, due to a misreading of natural phenomena or to a transposition of effect and cause. GUNTHER and EBERMAYER, supported by English observers like BLANDFORD, whose East Indian experience supplies many of the most significant data to the upholders of the popular view, are quite convinced that that view will ultimately be the scientifically accepted one. They point to the well-known tree in the Canary Islands, which, standing alone, absorbs from the sea breeze the moisture with which it bedews the ground beneath; they cite the so-called rain-trees of the tropics, which condense the watery vapour in such volume that they give it out in a kind of modified shower-bath, which converts the soil around them into a swamp; and they adduce the authority of FAUTRAT, who has made comparative statistics of the

condensing power of the different trees in European forests, and who shows that the best condensers are the firs, whose needles contain more than 50 per cent., while the foliage-crowns of the leaved timber detain at most 42 per cent., of the water that descends on them. These highly significant facts, however, do not constitute scientific proof, the materials for which are only of late years beginning to be compiled under the requisite conditions of period and locality. So far as they have gone, the researches of BRANDIS and STUDNIKA may legitimately be claimed as tending to a provisional confirmation of the popular induction; and if they are ever to be set aside, or even modified, it must be by better observation and argument than those employed by their more strenuous Transatlantic opponents. Even the ablest of these, Mr. HENRY GANNETT, does not deny a certain meteorological influence of forest culture on soil-productiveness. He admits that land under tillage retains its moisture better than land not so treated, and that woods equalise temperatures and air currents and act as water reservoirs. But some of his divergencies from the popular view are surely inadequately reasoned out; for example, that the great superficial area made up by leaves favours evaporation and sends back to the air a large proportion of the rain which, unintercepted, would go straight to the soil, which is thus impoverished of its due supply of moisture. To this objection EBERMAYER can rejoin that evaporation in the forest is two and a half times less than outside it; nay, CLAVÉ makes it as much as five times less. If we take into account the protective covering of the soil caused by the leaves that have been shed upon it, then, compared with the evaporation from the free or woodless ground, we get a diminution of more than 80 per cent.! The practical question, however, lies not so much in the increase or diminution of the rainfall as in its distribution. VAN BEBBER, in his work on the Influence of Forest Growth on Climate, shows that wood culture increases the rainfall, but that it acts more favourably on the weather by promoting an equable distribution of the moisture and by obviating extremes of temperature. "This effect," says one of GANNETT'S German critics, "is left completely out of account in the American's investigations, and it is therefore quite possible that reafforesting, without notably increasing the annual volume of rainfall, may yet have considerably enhanced the fertilising effect of the prairie showers. The old experience that the destruction of woods accentuates climatic extremes, and more especially enhances the danger of floods, has not thus far been contradicted. Nay, it receives calamitous confirmation in the disasters which, in the south Tyrol, for example, recur so frequently, and which it is vainly sought to prevent by artificial works." For the medical climatologist, as well as for the agriculturist, the further prosecution of the researches on the relation between forest growth and rainfall now so vigorously carried on in Germany is as practically important as it is theoretically interesting.

TO hold, or to profess to hold, views which are not in accordance with those currently accepted appears to be a fashion growing in favour with the public and with a certain section of the medical profession. It seems to matter little what the special war cry shall be so long as it serves to indicate a distinct line of thought and a distinct line of action. We are constantly deluged with leaflets setting forth the advantages of anti-vaccination, anti-vivisection, antipraxis, homœopathy, organopathy—to mention only a few of the clamorous systems. These terms serve as watchwords, and are apparently the result of a desire to stamp the formation of a clique which claims to be unorthodox. The leading idea, so far as it can be grasped, is separation from the main body of the profession and from the ordinarily recognised teaching. The titles do not indicate progress; they are merely the outward signs of revolt. Unorthodoxy is cherished for its own sake, quite independently of the truth or fallacy of the newer or older faith. It is relatively unusual, and it is therefore attractive. It is apt to be regarded as a sign of a special revelation rather than as a wilful heresy. So much sympathy is ordinarily bestowed upon the supposed rights of the minority that for a time we believe it really pays to be out of touch with the general opinion. It affords opportunities for wholesale proclamation of the virtues of the new faith. It allows description of prophetic visions of the results attainable when this new faith shall have been generally adopted. Those who are drawn into the magic circle to worship are flattered by the idea that they are profiting by the newest lights, that they are reaping a first harvest, from the participation of which others are excluded by ignorance and prejudice.

Unorthodoxy certainly has its charms. It is something to be able to assert that there is a difference, a characteristic which separates the unorthodox from the common herd. It is something to claim the right of independent thought, and the right to enunciate the new belief, and with it the name of the new high priest. The public is but too apt to lose sight of the labour which has resulted in the present position of medical science in its eagerness to welcome some new theory, and to test the truth of some new revelation. Many appear to feel as though they were moving with the spirit of the age in discarding older views and adopting new-fangled notions which have the charm of being inexplicable, or which are explained by hazy metaphysical terms in which the splendour of the language employed hides the emptiness of its meaning. It is so easy to ignore the inconveniently large array of facts which science is patiently building up; to say they are based upon erroneous notions; to brand physiological research as beneath notice, since many of its results had their origin in some careful experiment upon one of the lower animals; and then, having endeavoured to discredit modern medical skill, to start afresh with a vague generalisation which is as intangible as unintelligible. Most of the newer systems of treatment seem to be reverting to the practices of a past generation of mystery-mongers. The more obscure the method of treatment, the greater is its apparent success in those numerous cases which so often claim the proud distinction of defying ordinary medical skill. Faith-healing has had its day, and, although its services are still held, it may be doubted whether it will not soon have reached all the cases capable of being cured by faith. Treatment by suggestion is a more recent development of this, and for similar cases it may possibly perform miracles in the hands of those who

are not above adopting such measures. Unorthodox modes of massage and nerve vibration claim to be in the high noontide of favour, and have given rise to a curious literature of their own. Water and other "cures" still have their supporters with real and fancied ailments. Without a doubt many of these forms of unorthodoxy have been the means of alleviating some real and removing many imaginary complaints, and, when dispassionately considered, they will be felt to have done *some* good, although the need of a miracle may be questioned.

The unorthodox in our profession flourish mainly on account of the rigidity of orthodoxy—the rigidity which so often refuses to test and to prove or disprove new theories. It is considered that since the proclamation of doubt partakes so largely of a personal advertisement it is therefore unworthy of respectful criticism, and while this is too often true, it is evident that this very rigidity of respectability may lay itself open to the charge of being an unyielding dogmatism, too prejudiced to admit of the possibility of any advance. Sympathy with the unorthodox results, and leads to pity, which is proverbially akin to a yet more unreasoning state. When this last state is reached, the field is open, and nothing remains to be done but to proclaim the heresy in sufficiently loud tones, and then, for a time, a flock of patients will be sure to follow. It will rescue many whose complaints are mental rather than physical. It will reign supreme amongst those devoid of pathological change, who wander restlessly and hopelessly from one physician to another with that deep-rooted lack of faith which alike defies treatment and argument. But at its best unorthodoxy is but a temporary panacea, bound to be brought to a standstill when face to face with real disease. It is merely a fashion flourishing upon emotional contagion. Fashions will change, while the steady onward march of orthodox science will continue, supported by its host of earnest workers, who resist the temptation of the prospect of temporary financial success, seeking rather the satisfaction which comes with single-hearted honesty of purpose.

Annotations.

"Ne quid nimis."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

LAST week we congratulated the Society upon the successful completion of the negotiation for the acquirement of the lease of its new settlement in Hanover-square. This removal will no doubt affect the other Societies, particularly the Clinical and Pathological, who have hitherto found accommodation in Berners-street, in the rooms of the older Society. The question of a general removal, and the commencement as it were of a new life, has, as we have already intimated, suggested to some members of the three Societies, though as yet in quite an unofficial manner, whether the scheme which was debated some twenty years ago for the amalgamation of the leading Societies into one institution—a Royal Academy of Medicine, for instance—might not now be revived and carried into effect. Such a scheme would have a better chance now than at the time of its original proposal, since both the Pathological and Clinical Societies stand on distinctly a better footing than they did then. Indeed, it was mainly owing to a feeling of jealousy amongst some of the older Fellows of the Royal Society that the proposal, although receiving from many members considerable support, fell through. Even apart from any feeling of jealousy of the younger and perhaps more active Societies, it is certain that among many of the senior members of the profession they were at first somewhat coldly regarded. Sir James Paget, in his farewell address as President of the Pathological Society, has informed us of his reason for not joining the Society at its formation, and his regret at his delay. Since that time other Societies have sprung into existence and are receiving solid support, and would doubtless be glad to amalgamate. It seems absurd that Societies for special objects should be multiplied, since, under one common management, evenings might be set apart to meet every possible requirement. Besides, economy might be effected, both as regards the working and with respect to subscriptions. Another advantage would certainly be the issuing of the Transactions at least quarterly, if not monthly. This would be a distinct gain; for, instead of receiving five or six bulky volumes, all issued nearly at the same time, and offering too great a mass of material to be easily digested at once, the busy practitioner would have his information imparted in quarterly instalments, and at a time when the discussion of the questions raised was still fresh in his memory.

DR. LOOMIS ON SCIENTIFIC MEDICINE.

DR. LOOMIS, in his inaugural address as President of the New York Academy of Medicine on Feb. 7th, pointed out the need of a higher and broader culture in those intending to devote themselves to scientific work than was formerly required of them. The natural sciences, he said, have become the chief factors in modern civilisation, and medicine, which formerly rested upon authority and tradition, is now rapidly seeking its basis in those sciences. Hence the need of a special education for those preparing to study medicine, and a selection of those most fitted for its pursuit. In New York great advances had been made during the past twenty years in graduate and post-graduate instruction, but the demand of scientific medicine is not yet met. This demand requires a higher plane of teaching, further extension and subdivision of the curricula, and a personal knowledge of the student by the teacher, who shall be an educator, and not a mere instructor. Facilities for laboratory work and original research must be increased, and the medical colleges turned into "workshops of scientific medicine." Dr. Loomis appealed for support and endowment of educational institutions, believing that human misery would be quite as effectually mitigated by the devotion of gifts to such institutions as it would be by establishing hospitals and charities out of proportion to the needs of the city. He considered also that there was a need of the establishment of scholarships, fellowships, and independent lectureships to enable students of limited means to engage in scientific work. A public medical opinion should be created that should cause scientific attainments to become more honourable than mere professional success. Another need of scientific medicine, common to the whole world, is a higher standard of medical literature, and he deprecated the haste with which incomplete observations or unnecessary records were published. The cause of this lies in the mistaken idea that writing much will bring a proportionate success. Higher ideals should be inspired than this, and the *quality* of a man's writing be the first consideration. Another cause of medical redundancy is, according to Dr. Loomis, "the speculative interests of medical publishers, financial necessities of unsuccessful physicians, and conceit of self-appointed authorities," each offering an excuse for the establishment of a new medical journal, where "the doors are thrown wide open, and all aspiring young authors invited to enter, without

cost, where fame is found at every turn." These are not the hands to uphold our noble science, nor the spirits to suffer and work for a lifetime at the revealing of truth. Medicine is in want of high ideals; and pure science, which does not directly tend towards the production of material prosperity, needs encouragement. In an eloquent passage, Dr. Loomis went on to say: "It is America that has seized Jove's thunderbolts, and bound them in the service of mankind; has made them meek and patient servants, that do our bidding as does the muzzled ox, because the harnessed lightnings draw out the golden shekels. But he who seeks to bind in scientific laws the lightning of the mind, or trace the labyrinth that lies 'twixt cortex and medulla, must never hope to see the gleam of gold; he feeds alone upon the thought that generations yet unborn will one day know the worth of all his patient work, and will rise up to call him blessed." The time has come when not the few but the many should be given higher ideals, and Dr. Loomis pointed to the position which the Academy could take in furthering this object.

DEPOPULATION OF RURAL DISTRICTS.

THE paper which Dr. Ogle read on Wednesday last before the Statistical Society upon the Depopulation of Rural Districts throws light upon one of the most serious questions affecting the well-being of the community. The tendency of the population to collect in large towns and densely inhabited districts is one which cannot be regarded with equanimity by any well-wisher of his kind. Much has no doubt been done in recent years by sanitary improvements to ameliorate the condition of the dwellers in towns, and much more still remains to be done. But when the utmost that it is possible to expect from this source is allowed for, it still remains clear that there are great advantages from a sanitary point of view in the open-air life of the country side. The natural activities and wholesome surroundings of the hillside and the meadow can never be replaced by any amenities which it is possible to introduce into the region of streets and squares. It is in rural parts that the most robust section of the population must be produced and nurtured, and hence anything approaching to a depopulation of rural districts would be as great a calamity as could overtake the country. Dr. Ogle denies the fact of depopulation, and disputes the aptitude of that term to express the general result of the movement of population as traced in the returns prepared in the General Register Office. By a careful and minute analysis he comes to the conclusion that in the thirty years between 1851 and 1881 the rural population had diminished, if at all, by not more than 1 per cent., and that this utmost limit was well within the necessary allowance for error in the materials from which the returns have to be prepared. This is so far satisfactory that it serves to show, when consideration is had of the improvements which have been made in agricultural machinery during that period, that farming was probably as well and as thoroughly done at the later date as at the earlier. Of course there is not the same scope for increase of the agricultural as of the urban population. When once the land is fully farmed, additions to the number of persons engaged in tillage can only accompany altered forms of culture or else the impoverishment of the craft. A stationary rural population is therefore by no means a bad symptom *per se*. But it diminishes the proportion of the rural element in the general stock, and this is a point well worthy of careful and even anxious consideration. Among the conclusions which Dr. Ogle drew was one to the effect that the necessary result of the continuous migration of the most energetic and vigorous members of the rural communities into the manufacturing districts, and of the higher mortality in these latter, is a gradual deterioration in the physique of the whole population. This, however, was hardly a deduction from any of the figures which he presented; it was rather an inference from general principles, and it is at least open to us to hope that the residual population which remains upon "the land" is not quite so inferior in energy and vigour to that which migrates to the towns as the dictum assumes. Still, in view of the enormous growth of our towns which takes place in fact, and necessarily, at the expense of country districts, it becomes of special and pressing importance that the disgrace of insanitary dwellings and squalid neighbourhoods should be blotted out, and air, light, and water, wholesome and abundant, with adequate shelter and needful rest, be brought within the reach of every member of the community.

THE COLOURING MATTER OF MUSCLE.

THIS subject has received much attention since Kölliker, in his work on Histology, published in 1850, first described it. A few years afterwards Valenciennes and Frémy found a peculiar colouring matter in the muscles of the trout, to which they applied the name of "salmonic acid." Kühne, ten years later, came to the conclusion that the colouring matter of muscles was identical with hæmoglobin. After the lapse of twenty years it was again investigated by Krukenberg and Wagner, who, partly from its spectrum and partly from other considerations, regarded it as identical with rhodopham. Very recently MacMunn has contributed a long paper to the Philosophical Transactions, in which he has given in detail the results of his investigations on this subject, and endeavoured to show that in a large number of animals belonging to both the vertebrate and invertebrate series the tissues contain a special colouring material, which he names Histohæmatin, whilst the muscles possess a special colouring matter named Myohæmatin. The spectrum of histohæmatin closely resembles that of hæmochromogen, but that of myohæmatin is peculiar. Ludwig Levy has now published (in Hoppe-Seyler's *Zeitschrift für Physiologische Chemie*, Bd. xiii., Hft. iv.) an article containing the results of many experiments, from which he concludes that the substance named Myohæmatin by MacMunn is not a colouring material proper to muscle, but is a product of disintegration of hæmoglobin, and that its spectroscopic characters, as well as its mode of origin and its reactions, demonstrate that it is hæmochromogen.

THE CRUSADE AGAINST SWEATING.

SLOWLY but surely the revelations made concerning the sweating system are bearing fruit. No great radical change has taken place, no sweeping measures have been introduced; but a much better feeling prevails among the employers, and even among the sweaters themselves. In the hard, competitive warfare which is called commerce, the necessity of watching the sanitary condition of workshops had often been entirely overlooked. Mr. R. E. Sprangue Oram, one of Her Majesty's superintending inspectors of factories, who as the travelling secretary of the House of Lords Committee on the Sweating System has been collecting evidence at Cradley, Birmingham, Sheffield, and in Scotland, stated in a recent interview that the inquiry has put many employers on their mettle. They were now anxious that the conditions under which their workpeople laboured should not give rise to a public scandal. In this respect also the Government has set a good example. Since the inquiry was instituted, the Director of Contracts in London has issued an order stipulating that in tenders for army contracts the rate of the wages paid in the various branches of the work must be clearly stated. Further, if the terms are accepted and the contract granted, then the contractor

must hang up in his workshop copies of these specified rates of wages for the information of the workpeople. In this manner the workpeople will only have themselves to blame if they are underpaid. The fact that such improvements are being realised before the conclusion of the inquiry, and before any legislation has been attempted on the subject, justifies the hope that the work of reform will be far reaching and beneficent in its results when once it is taken seriously in hand.

PARACENTESIS PERICARDII.

IN the course of an article upon pericarditis (*L'Union Méd.*, No. 31) M. Paul Chéron cites Fevrier's conclusions respecting the indications for surgical interference, and the best method of puncturing the pericardial sac. Such interference, he says, is called for when the effusion by its quantity threatens to arrest the action of the heart; that in such a case the presence of a concomitant pleural effusion must not be overlooked, and, if existing, should be dealt with first. A second ground for intervention is when the effusion is of long standing, and consequently liable to induce change in the cardiac muscles. A third indication is the fact of the effusion being purulent. Fevrier does not refrain from recommending tapping in tubercular pericarditis, in spite of the fact that out of twenty-two cases of this form of pericarditis so treated twenty patients died at various intervals (from eight hours to seven months) after the operation. Fairly good results have been obtained in hæmorrhagic cases, five out of nine having recovered after tapping. In serous effusions simple puncture suffices, but in purulent cases the pericardium must be incised. Out of fifteen cases of purulent pericarditis treated by incision, eleven died. He warns against delaying the operation too long, and attributes to that circumstance an instance where sudden death followed washing out of the sac, the heart being probably degenerate. The site selected for puncture by the aspirator should be the fourth or fifth interspace to the left of the sternum. For free incision it is recommended to select the fifth interspace, and to incise the tissues layer by layer for a distance of three or four centimetres, taking care to avoid the internal mammary artery, which may need to be drawn inwards; then, having exposed the pericardium, it may be carefully incised with a guarded bistoury, the portion of the membrane being drawn forwards by forceps. Great care should be exercised in irrigation, if this be employed.

RECRUITING FOR THE ARMY.

THE annual report of the Inspector-General of Recruiting for the year 1888 shows the number of men who joined the army during the year to have been 25,153, or about 6000 under that of the preceding year. The "waste" of the army in the same period was 25,452, there having been 8380 transfers to the Army Reserve and 17,072 having become non-effective from other causes, so that the number enlisted was scarcely equal to the decrease. Owing to an increase in the establishment which was sanctioned during the year, the strength of the army on Jan. 1st, 1889, was 1014 under the authorised numbers. Of the recruits who joined, 10,283 came from the militia. The medical returns for the period not having been completed, no information is given as to the number of recruits who offered themselves for enlistment, or the number rejected and the causes of their unfitness for military service. The quality of the recruits passed into the service is reported by the General Officers who inspected them to have been, on the whole, satisfactory. The return shows the deaths in the army to have been 1852, and the discharges by invaliding 2750, in an average strength of 202,761, or in the ratio of 9·13 and 13·56 per 1000 respectively. Of men under one year's service 7·31, of those from one to two years 12·53, and of those from two to three years 12·45 per 1000 were discharged as invalids, giving an average of 10·82 under three years' service. During the year the Militia raised 30,458 recruits, being about 3000 fewer than in 1887. The Inspector-General observes: "No argument is wanted to prove that men do not come forward in the same numbers for military service when wages are high and employment plentiful, as they do in times of commercial depression." The strength of the Militia on Jan. 1st, 1888, was 108,718. Of these, 408 were reported to have died during the year, being in the ratio of 3·75 per 1000, but it is probable that all the deaths were not reported; 3916, or 36·02 per 1000, were discharged as invalids; and, as above stated, 10,283 joined the regular army.

OUR CASUAL POOR.

WE have from time to time drawn attention to the unsatisfactory arrangements made for the accommodation of those who, often from no fault of their own, are temporarily homeless, or who, from the shifting of the labour market, are compelled to seek other fields of work. The present system drives these unfortunates and casual wanderers into a society most revolting to decent and still honest men and women, who have to herd indiscriminately, often night after night, in the overcrowded casual wards of the workhouse, amongst professional vagrants, thieves, and beggars. No question is asked whence they come or whither they are going; they are subject to no examination by the medical officer, and may consequently convey, either in themselves or their clothing, the seeds of contagious diseases, which they may carry stage by stage across the country. Some short time since, in one of the eastern counties, an epidemic of diphtheria made its appearance along a certain line of villages, and baffled for a time the acumen of the district medical officers of health, as none of the ordinary causes for such an outbreak seemed in this case to account for the particular line taken. Here, no doubt, was an instance of a tramp from an infected district bringing disease with him, and distributing it in places along his route. But, in addition to the injustice to the wayfarer travelling for a legitimate purpose, and the danger of infection being carried from one spot to another, we have also the fact that but an inconsiderable proportion of those who start with an honest purpose arrive at their destination without being corrupted by the depraved company they are brought in contact with at their resting places. "Once a tramp always a tramp" is well shown by statistics, which prove that scarcely 10 per cent. of the huge wandering population that nightly seek a refuge in the casual wards of our workhouses are genuine travellers, the remaining 90 per cent. being made up of habitual tramps and persons mentally or physically weak and afflicted. We are, therefore, pleased to find the subject is being taken up by the Poor-law officials, and a memorandum on the question is now being widely circulated, seeking information and asking advice as to the best means of dealing with the evil. In reply, we repeat the suggestion we have before made—viz., the separation of wayfarers into two classes: the casual traveller, whom temporary circumstances have deprived of a home, or who is seeking employment; and the habitual tramp. The former, if an honest man, should be able to furnish some reference to his past, and his object for removing from one part of the kingdom to another; and then, if his reference were satisfactory, he might be supplied by the police or parish authorities with a pass which would entitle him to a night's lodging in a separate cell, and some simple food, and to be sent on his

way to the next resting place without the exaction of any penalty in the shape of stonebreaking. With the habitual tramp sterner measures should be adopted. A tramp unprovided with a pass should be reported to the police, and if his account be not satisfactory, brought before a magistrate and punished as a vagrant. At all events, his movements should be kept under observation by the police.

ECZEMA OF THE NAILS.

DR. DE LA HARPE, *privat-docent* in the University of Geneva, mentions in the *Revue Médicale de la Suisse Romande* a somewhat rare case of eczema of the nails which came under his notice while he was acting as medical officer at the well-known baths of Louèche, or Leuk. The patient was a man of sixty, who had been sent to Louèche by Professor Hardy. There was no history of gout or other hereditary disease, and up to two years previously the nails had been in excellent condition. The first sign of anything wrong that was noticed was a slight redness about the ungual furrow of the ring finger of the right hand, which was at first supposed to be panaris, but instead of going on to suppuration it was followed by morbid changes in the nail itself, which soon became thickened and friable, with a roughened surface. The nails of the other fingers on both hands subsequently became affected, as shown in figures appended to the paper. When seen by Dr. de la Harpe, the affected nails were swollen, bent transversely, and marked with longtitudinal striæ or grooves. Two apparently healthy nails showed fine depressed points. Regarding the cause of these appearances, which are the first signs of the commencement of the affection in otherwise normal nails, Dr. de la Harpe remarks that he has seen a case of chronic eczema of the hand in which there were a number of longitudinal grooves on the nails, some of them interrupted—that is to say, in sections. The punctate marks on the nails in the case in question may possibly be analogous to the interruptions noticed in this latter case. As to the treatment by means of the Louèche waters, it appears to have effected marked improvement.

MEANS OF ISOLATION AT REDCAR.

AT the last monthly meeting of the Redcar Local Board of Health, Dr. Stainthorpe brought under notice the urgent need for some proper means of isolation for infectious diseases. At present the only arrangement in force is one that admits of the use of the Middlesbrough Infectious Hospital, and this is not always available. Besides which, in a health-resort like Redcar, it must often be of primary importance to secure immediate isolation for persons who would certainly refuse to be transported to Middlesbrough, and whom it would be quite impossible to remove there under the compulsory clauses of the Public Health Act. For a similar reason we are inclined to think that combination with another authority for the purposes of providing means of isolation does not in this case present the usual advantages. Visitors and others falling ill would object to removal to any place at a distance, and even residents in Redcar would more readily assent to be isolated in a building belonging to their own town than in any other. What Redcar really needs is such accommodation as will most certainly ensure the immediate isolation of those sickening with infectious diseases, and this can probably be best attained by the erection within the limits of the urban district of a small isolation pavilion containing some four sick-rooms, much after the style indicated in the plans which were a short time since issued by the Medical Officer of the Local Government Board. Such a building would have the advantage of providing separate accommodation for those who prefer to pay for privacy.

SECOND INTERNATIONAL CLIMATOLOGICAL CONGRESS.

FROM the French Ministry of Commerce and Industry invitations are being issued to assist at the second session of the Hydrological and Climatological International Congress. The first session, or congress, met at Biarritz in October, 1886, and at the time we published a short notice of the proceedings. The second session will be of more importance. It will be held at the Paris Universal Exhibition, and under direct Government patronage. The sittings will last from the 3rd to the 10th of October next, and the delegates will have free admission to the Exhibition when the congress meets in the building. All members are charged a fee of twenty francs to defray the cost of publishing a full report of the proceedings. There will be three sections: (1) hydropathic section, (2) scientific and medical section, and (3) climatological section. Each has seven subjects for discussion, and printed papers will be issued previously to the meeting of the congress so as to form a basis of discussion. The first section comprises all that relates to water and water analysis, how to determine temperature, the connexion between the geology of a district and its mineral waters, the micro-organisms contained in mineral waters and their effect on the composition of such waters, the influence of microbes on thermal therapeutics, the gases and vapours of waters, &c. In the second section we have the effect of the thermal treatment of diseases of the heart and kidneys, neurosis, diseases of the uterus, sea-bathing for children, &c. In the third, or climatological section, the best method of meteorological observation in its bearing on medicine will be discussed; and such questions as the climatic difference of various health resorts, their classification, the effect of elevated altitudes and of maritime climates on chest diseases; finally, a programme for climatological instruction. The committee organising the congress has selected M. E. Renou, director of the St. Maur Meteorological Observatory and vice-president of the Meteorological Society of France, as its president. Dr. Danjoy, president of the Medical Hydrological Society of Paris, is vice-president of the committee. Dr. F. de Rance is secretary-general, and will supply all information to correspondents addressing him at 53, Avenue Montaigne, Paris. Several other medical men form part of the organising committee, and they promise the members of the congress a pleasant excursion to the mountains of the Vosges. This congress is but one of the many attractions that are in store for visitors during the year to the Paris Exhibition.

"LEPROSY IN DUBLIN."

A PARAGRAPH under the above heading has appeared in the press, but it does not follow that leprosy has broken out in the Irish capital. It refers to a case of the disease, the details of which were communicated to the Royal Academy of Medicine (Section of Pathology) on the 15th ult., by Dr. O'Carroll. The disease, which was of the mixed form, first showed itself in Hong Kong twenty-two years ago; but the patient, an Irishman, had previously been in India and the Cape. He was not discharged from the army until 1872. The eruptions were distinguishable into primary tubercular and macular, more or less generally distributed over the head, trunk, and upper part of the limbs; and secondary bullous, or pemphigoid, over the peripheral distribution of the ulnar and external popliteal nerves. There was also ulceration of the palate, and some caries of the foot, but some difference of opinion existed whether the latter lesions were primarily leprous. Dr. Patteson, however, said that serum from the sinus of the foot yielded a large number of bacilli. Dr. Donelly pointed out the similarity of the lesions to those of a bad form of syphilis.

THE OPERATING-ROOM AT THE HOTEL DIEU IN LYONS.

THE new operating-room at the Hôtel Dieu in Lyons, which has recently been opened for use, would appear from a lecture delivered by Professor A. Poncet, who has charge of the teaching in Operative Surgery, to be one of the most completely aseptic operating-rooms to be found. M. Poncet has had it constructed according to designs of his own, elaborated after a visit to many of the hospitals in England, France, Germany, Austria, and Switzerland. The two objects he set before himself were the prevention of infection by means of air or through contact. It is about 30 ft. in length by 20 ft. in breadth, the height being about 24 ft. As its situation beneath the wards rendered a skylight impossible, the light is admitted by one immense window, the eight panes of which are made to open. Artificial light, when required, is obtained from a Wenham gas-lamp, which can be lowered to within about seven feet of the ground. The walls are covered to the height of five feet with glass, forming a dado, above that with perfectly smooth stucco of a rose-grey tint. All the angles are rounded. To the walls are fixed nickelled brackets supporting shelves of plate glass, which, however, do not come within half an inch of the wall; on these shelves stand vessels containing antiseptic solutions, and ingeniously constructed metal receptacles for dressings. The ceiling is in the form of a dome, and the floor, which is of cement, slopes slightly to an aperture in the centre leading to a carefully constructed drain. The surface is channelled, and is washed down daily, also once a week with carbolised water. The few chairs and benches are made of bronzed iron; the tables are made with glass tops and metal frames, and are provided with casters. The operating table is entirely free from the complicated mechanism frequently seen, and the top, which is of glass, is, like the floor, made to slope towards the centre, where there is an aperture communicating with a drainage-tube. The mattress is covered with mackintosh, and is perforated so as to allow of drainage. When the patient requires to be propped up, pillows and cushions covered with mackintosh are used, to the entire exclusion of mechanism. Ingenious arrangements are made for the reception of the anæsthetist's and the surgeon's appliances, and a second table is provided for operations requiring the operator to stand between the patient's thighs. The instruments, whose handles are specially made with a view to prevent any difficulty in cleaning, are all washed in glycerine at the temperature of 120°C., and then kept in carbolic solution.

INFECTION AND FREE LIBRARIES.

THE progress which has already been made in establishing and maintaining free libraries in many of our cities is doubtless owing in large measure to the facilities afforded by the lending department. Any failure of activity here would certainly lessen public interest in the work as a whole, and would effectually cripple its utility. It is therefore most necessary to note and correct in time the occurrence of any circumstance which appears to have this tendency. To one such we would now, though not for the first time, direct attention. This is the conveyance of infectious disease by means of circulating volumes. That such disease can be so conveyed is beyond all question, and this fact has lately been impressed upon newspaper readers by the recital of illustrative cases coming under the actual observation of medical men. We have no need to seek far for evidence to prove that in the present condition of public enlightenment it would be worse than folly to rely upon the forethought of casual readers for any sufficient safeguard against the danger in question. It is obvious that, if any real good is to be done, the library committees must legislate on their own behalf. A set of rules dealing specially with this subject ought to be embodied in the code of every such institution. The circulation of books in any infected family would of course be prohibited, and in the event of contagious disease appearing after a book had been borrowed, the latter should at once be disinfected before being again placed in circulation. More stringent measures would necessarily be applied to the case of persons borrowing from the library while themselves infected or living in an atmosphere of infection. Permission to obtain any book should be withheld for a sufficient time. The disinfection, or better still, if possible, the substitution of a new volume for one already taken out, should be insisted on, and any repetition of the first offence be held to justify exclusion from the benefits of the library for a considerable period. The work of disinfection would probably be most efficiently done if carried out by the library authorities, of course at the cost of the borrower. Subject to such variations of detail as might be required, the adoption of a series of regulations such as the above would go far to secure the free libraries against a real and dangerous check upon their useful work. Some similar arrangement might also be advisable in the case of libraries generally.

PUBLIC HEALTH OF GIBRALTAR.

THE report of the health officer of Gibraltar for the year 1888 shows a satisfactory reduction in the death-rate compared with that of the preceding year. The deaths amounted to 378 in a civil population of 18,381, being in the ratio of 20·5 per 1000, while in 1887 it was as high as 27·7 per 1000. About two-fifths of the deaths were of children under five years of age, but, as no information is given as to the age-distribution of the population, it is impossible to say whether this is an excessive death-rate. The last quarter of the year furnished the greatest number of deaths. This was attributed to the excessive wetness of the season, the rainfall of the year having been 47·8 inches, or at least one-fourth above the average. The most fatal disease appears to have been pneumonia, which was returned as the cause of 41 deaths, and of these 23 were above five years of age. Enteritis gave rise to 27 and tubercle of lung to 21 deaths, 20 of which were of persons above 10 years old. Old age was assigned as the cause of 28 deaths, and of these 15 were over eighty, and one of the decedents was stated to be 108 years of age. There were 8 deaths from enteric fever, all between the ages of fifteen and forty. Diphtheria seems to be endemic, as in each of the last four years there have been 12 or 13 deaths from it annually. The health officer calls attention to the excessive overcrowding, impurity, and dampness of soil under and around the dwellings, connexion of sinks with drains, carelessness in collecting and storing rain water (especially from neglect to clean the roofs and the terraces which are used as a collecting ground for water), the omission (often for years) to clean out the tanks, the ventilation of sewers by open street ventilators, the connexion of the overflow pipes of rain-water tanks with drains, and the bedding of soil pipes in the walls of rooms. Surely in a garrison like Gibraltar, where the military power is supreme, effective measures should be taken at once to remove such manifest causes of disease, which are likely to affect injuriously the health of the troops. This duty appears to devolve, as regards the civil population, upon the "Sanitary Commissioners," a local authority instituted in 1865; but there can be no doubt that the Governor has the power to enact such regulations as he may consider necessary for the preservation of the public health, and to cause them to be carried into effect.

GIANT CELLS AND ELASTIC TISSUE.

THE precise significance and function of giant cells have long been a subject of debate. It is barely twenty years since their presence in tubercle was regarded almost as pathognomonic, but histologists were not slow in demonstrating their presence in many other specific and non-specific inflammatory formations. The further development of their *rôle* is to be seen in the discoveries that showed them to abound in regions where active absorptive processes were going on, whilst it was reserved for Metschnikoff to demonstrate their important part in bacillary diseases. In tuberculosis and in leprosy the giant cell represents the unit of the organism struggling against the invasion of the specific microbes, for in presence of the facts that have been brought to light concerning these diseases it cannot be doubted that as "phagocytes" the giant cells are most prominent. Dr. Ssudakewitsch of Kieff has (*Virch. Arch.*, 115, Hft. 2) now shown that such cells play an important part in the destruction and removal of the elastic-tissue of the corium in certain diseases of the skin—a question which has not hitherto received much attention. His first observations were made in 1885 on a nodule of the so-called "Sart'schen Krankheit" (Pascha-charda) which had been given him by Dr. Munch, who obtained it from a case of that affection at Samarcand. The disease is probably the same as the Aleppo boil, which rejoices in many synonyms. The essential feature of the disease is a granulomatous infiltration of the deeper layers of the skin, probably due to micrococci, the presence of which was proved by this observer. But he also discovered that many of the giant cells, which occurred in large numbers, contained fragments of elastic-tissue fibres in various stages of disintegration. He deferred publication of this discovery until he had an opportunity of confirming it in other diseases in which giant-cell formation is prominent. He found this in a case of lupus, when he succeeded (especially by staining the fibres with Herxheimer's hæmatoxylin solution) in demonstrating clearly that the elastic tissue is removed by the agency of these cells. He describes and figures several stages of disintegration of the fibres within the interior of giant cells, but leaves it an open question whether the fibres degenerate in consequence of the action of the cells, or whether these latter are simply carrying out their phagocyte *rôle* in removing tissue that has become necrotic. At any rate, it is interesting to learn the fact that a tissue so resistant as the elastic fibres of the skin is destroyed and removed by such a process.

METROPOLITAN ASYLUMS BOARD.

THE position of the Metropolitan Asylums Board in regard to the employment of its officers obviously requires amendment. Owing to the closing of the South-Western Hospital, Dr. P. H. MacKellar has received three months' notice to terminate his engagement and £1000 as compensation for loss of office. This officer has held his appointment for fifteen years, and has the entire confidence of the Board. It is therefore to the interest both of the public and of the Board that he should continue in the service of the managers. The institution with which he has been connected will probably again be opened in a short while, and the managers will be under the necessity of employing Dr. MacKellar in a temporary capacity, or of obtaining the services of a new officer whose fitness for the special duty has yet to be demonstrated. In all probability the latter will be the case if it cannot be prevented by anticipation. We fail to see what gain accrues to anyone by the termination of Dr. MacKellar's appointment. The managers lose the services of a trusted officer, and the public who have already availed themselves of the institution the advantage of knowing that infectious diseases were under the care of a man of whom they had had experience. We do not doubt that the managers are themselves dissatisfied with circumstances that have led to this step being taken, and we trust they will be able to free themselves from the difficulties which now attach to their service.

THE HAMMOND SPLINT FOR FRACTURES OF THE LOWER JAW.

MR. CHARLES TRUMAN, at a demonstration on fractures of the jaw at the Dental Hospital of London, drew especial attention to the "Hammond" splint, as being easy in application, cheap, efficacious, and, if required to be made by the medical practitioner, demanding no great technical knowledge. The splint, as is well known, consists of a loop of wire passing over the dental arch on the outside, and returning on the inner side at about the level of the necks of the teeth, and forming a continuous band, the teeth being here and there ligatured to it. Mr. Truman recommends tinned iron wire for the purpose, the ends of which can be easily soldered together if, instead of the usual and difficult method of braising, a metal tube—say German silver—is made into which the cut ends of the iron wire are inserted and soldered with pewter solder, which will produce a joint strong enough for all practical purposes. For ligatures silver wire is preferable to iron binding wire, because it is more easily manipulated and is always procurable by the surgeon. It is suggested that six sizes might be kept at general hospitals, and that these would meet the requirements of most cases of fracture of the lower jaw presenting themselves for treatment.

ILLNESS OF EMERITUS PROFESSOR DONDERS.

PROFOUND regret is caused throughout the medical world by the announcement of the very grave illness of this eminent Dutch physician and ophthalmologist. At his recent jubilee, when, as we have already indicated, he had retired from academical work for no other reason than compliance with the consuetudinary law of universities in Holland, by which no professor can occupy a chair after his seventieth year, he looked as if his active life was to be extended far beyond the term of the Psalmist. On the festive occasion referred to he seemed as young in years as in energy and spirit, and it was even suggested that the hard-and-fast regulation that deprived Utrecht and Holland of his services might, by statutory provision, be relaxed in his favour. But *dis aliter visum!* Apoplectic seizures of progressively increased gravity have left his physical and mental powers so impaired that all hope of his restoration to health has now been abandoned. First his memory, then his power of sustained attention, finally reason itself, all have gone; and one of the clearest and strongest intellects ever devoted to medicine is now sunk in dementia. He has moments—so we learn from one who is near and dear to him—of acute physical pain; so acute, indeed, as to mitigate the poignancy of the conviction that his end is now so near.

TREATMENT OF FRACTURED PATELLA.

DR. GALI, of Seville, having tried all the ordinary appliances for fracture of the patella, and having had a very limited amount of success with them, found, almost by accident, that one patient upon whom he was going to operate, who had been in hospital but a few days, was able to walk to the operating table without crutches, and only limping very slightly. Dr. Gali considers that such patients should be encouraged to get about on crutches almost from the beginning, and as soon as they are able to manage without them they should be discarded. How far this advice has been put into practice we are not told.

THE CASE OF PASSANANTE.

IN the November of 1878, when the King of Italy was making a State progress through Naples, His Majesty was attacked by one Giovanni Passanante, who, mounting on the step of the carriage, dealt a blow at the King with a poniard, which, however, missed its intended victim, and was received by Signor Cairoli, the then Premier, who was sitting beside his royal master. Passanante was at once put under arrest, and, suspicions as to his sanity having arisen, he was subjected to a very careful examination by the four leading alienists of Italy—Professors Verga, Tamburini, Buonomo, and Tommasi. They found him quite free from morbid impulse or preoccupation of any kind, and their report, given *in extenso* in THE LANCET of March 1st, 1879, may yet be read with interest as a specimen of elaborate and ingenious psychical diagnosis. In consequence of their finding, the would-be regicide was made a State prisoner for life at Portoferraio, in the island of Elba; but he was visited from time to time by distinguished alienists, who, mainly from the above-mentioned report, had become greatly interested in his case. As months and years went on he gradually came to manifest symptoms of mental derangement, and these had lately become so pronounced that it was suggested by Dr. Marini, a visiting physician, that another examination of his condition should be made. This was accordingly undertaken by Professor Tamburini and Dr. Biffi, who arrived early in the present month at Portoferraio for the purpose. Their report will be found not less interesting than its predecessor, the two together forming an able and elaborate study in the genesis and progress of mental disease. Pending its publication, we are in a position to state that the eminent alienists find Passanante labouring under what Professor Tamburini classifies as a "frenopatia sistematizzata con delirio di persecuzione e megalomania" (systematised phrenopathy with delusions of persecution and moral exaltation). In consequence of this diagnosis Drs. Tamburini and Biffi recommend the patient to be transferred at once to an asylum for criminal lunatics, a step which will be forthwith carried out. Italian alienists of eminence aver that they had anticipated this finding from the indications given in the first report, and it is more than probable that, when the one just drawn up appears, it will give rise to some keen though courteous controversy as to whether the original diagnosis did not err in the direction of over-caution.

OPHTHALMIA IN THE MADRID POORHOUSES.

AN inspection which has recently been made of the eyes of the inmates of the poorhouses and pauper schools in Madrid has revealed the fact that ophthalmia is exceedingly common, no less than 28 per cent. of the inhabitants of these institutions being affected with one form or another of eye disease. Out of a total number of 1757 persons examined, 69 had simple catarrhal conjunctivitis, 147 chronic blennorrhœa (purulent ophthalmia), 116 granular conjunctivitis, 29 ulcer of the cornea, and 49 opacities of the cornea. In one of the institutions the proportion of inmates with diseased eyes was as high as 48·73 per cent., about half of these having chronic purulent ophthalmia. As long ago as 1845 a report was made on the subject of an epidemic of ophthalmia which occurred at that time in some of the poorhouses, which seems to have been accompanied by inflammation of the bronchial mucous membranes and by gastro-intestinal and urinary troubles. Instead of referring it to the bad hygienic conditions which are now known to be the cause of this disease, it was supposed to be due to the employment in the institutions of vessels made of copper, and consequently little was done to remedy the sad state of affairs, which no doubt was really responsible for the so-called epidemic. Since that time several reports have been made on the subject, but, as is only too often the case, especially perhaps in Spain, little practical improvement has resulted from their publication.

THE MIDDLESEX HOSPITAL.

THE resolution of the authorities at the Middlesex Hospital to create a separate out-patient department for diseases of children is to be commended. It may be remembered that, in his opening remarks at the Section of Diseases of Children at the Glasgow meeting of the British Medical Association, the chairman, Dr. Cheadle, strongly advocated the formation of distinct departments of this kind in the general hospitals; and the plan is one which, from an educational as well as a therapeutic point of view, is sure to be of value. At the Middlesex Hospital the formation of this department necessitates the appointment of a fourth assistant physician. We are also informed that Dr. Edis has resigned his appointments of obstetric physician and lecturer on midwifery.

VOLUNTEER SANITARY COLUMNS IN THE GERMAN ARMY.

THE 1st of April will witness the carrying out of the new plan of mobilisation for the German Army, and in organic relations with it the establishment of Freiwilliger Sanitäts-colonnen (volunteer sanitary columns) at the principal halting stations. The duties of these columns will consist in the transport and first tendance (*erste Verpflegung*) of the soldier who is carried out of the field of action or of campaign in a wounded or sickly condition. The network of these columns has already been spread over all Bavaria, with the exception of the two towns in the south, Kempten and Lindau. Now, we understand, this defect has been supplied, and the organisation of volunteer sanitary columns for Southern Germany is as complete as in the northern states of the empire.

THE HARVEIAN SOCIETY.

THE practical character of the meetings of this Society is being fully maintained. This is as it should be with a Society which has within its ranks so many of those whose time is exclusively occupied in private practice. Last month Mr. Shirley Murphy read an instructive communication on the subject of House Drainage and its relation to disease, and this was ably supplemented by Dr. Corfield, who spoke on the legal aspect of the question—a part of the subject medical men are not well acquainted with. At the last meeting Mr. Butlin introduced the subject of Precancerous Conditions of the Tongue, and a very interesting series of cases was shown by him and by Mr. Jacobson. The meetings have been well attended, and the fulness of the discussions shows how much the papers have been appreciated.

THE IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

ST. PATRICK'S DAY being Sunday, the Irish graduates had their dinner at the Holborn Restaurant on Saturday last, under the genial presidency of Dr. Richard Fegan, who succeeds Professor Macalister. The gathering was large and brilliant. The Irish graduates set other clubs a good example by inviting lady guests and graduates. The usual toasts were drunk, that of the Association being proposed by Mr. G. Augustus Sala.

FOREIGN UNIVERSITY INTELLIGENCE.

Dorpat.—Dr. Wener von Zoege-Manteuffel has been recognised as *docent* in Surgery.

Gratz.—The chair of Anatomy vacated by Professor Zuckerkandl, on his appointment to the chair in Vienna, has

been offered to and accepted by Professor Wilhelm Henke of Tubingen, the author of the well-known Handbook of Anatomy.

Munich.—Dr. Ismer has qualified as *privat-docent* in Obstetrics and Gynæcology.

St. Petersburg (*Military Medical Academy*).—A new laboratory for microscopical and bacteriological research is to be established, under the charge of Dr. Rapchevski.

Vienna Hospital.—The third obstetric clinic at this hospital, the director of which is Dr. G. Braun, has had to be closed on account of the occurrence of an epidemic of puerperal fever. This is believed to be due, not to any want of antiseptic precautions, but to the unsatisfactory hygienic condition of the building, which is old, and in which there have been repeated epidemics of puerperal fever.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Señor Don Joaquin Gimeno, Professor of Pathology in Saragossa, and editor of the political journal, *La Derecha;* Dr. Ivanovski, one of the few surviving students of the old Medical Academy of Wilna, at the age of seventy-eight; M. Denucé, Honorary Dean of the Bordeaux Faculty of Medicine.

LAST week a complimentary dinner was given to Sir William Roberts at the Queen's Hotel, Manchester, by his medical friends and colleagues, on the occasion of his leaving Manchester to reside in London. An address was presented to him indicating the high appreciation entertained of his services to medical science, and to the profession in Manchester. Dr. Renaud presided, and a large gathering of medical friends united in expressing their regard for Sir William Roberts and their good wishes for his welfare.

PROFESSORS DU BOIS-REYMOND and VON HELMHOLTZ are at the head of a branch committee in Berlin to co-operate with the central committee in Munich for the erection of a national monument to Georg Simon Ohm, one of the greatest of European electricians. The English and French committees for the same object have now their counterpart in an Italian one, which includes Professors Blaserna of Rome, Righi of Bologna, and Macaluso of Palermo. Spain joins the movement through her Professor de Luna.

WE understand that a preliminary meeting of members of the profession will be held to discuss the question of "hospital abuse" at the Medical Institute, Birmingham, on Monday next, the 25th inst., at 4 P.M. The promoters of the meeting hope that the importance of the subject will ensure a large attendance.

AS will be seen by our Parliamentary report, a Bill to exempt charities and hospitals from local rates has been read a first time in the House of Commons. It is backed by Sir Julian Goldsmid, Baron de Rothschild, Sir Robert Fowler, Sir Algernon Borthwick, Mr. Octavius V. Morgan, and Mr. Lawson.

WE learn from the *University Medical Magazine* for March that Dr. J. William White has been elected Professor of Clinical Surgery, and Dr. John Guiteras, Professor of Pathology and Morbid Anatomy, in the University of Pennsylvania.

W. R. SMITH, M.D. Aberd., D.Sc. Edin., D.P.H. Camb., has been appointed Professor of Forensic Medicine at King's College.

ON SOME PHASES OF THE CONSTITUTIONAL HISTORY OF THE COLLEGE OF SURGEONS.

By JOHN TWEEDY, F.R.C.S.

IN the issue of THE LANCET for March 9th the exclusion of the Members of the Royal College of Surgeons of England from participating in the management and administration of the College is referred to as a grievance of at least sixty years' standing. It is really of much earlier date, and had its first small beginnings in the sixteenth century, when, in accordance with what has been called the *Degeneration* of Gilds, the government of the gilds slowly slipped from the general assemblies of gild-associates to a "Court of Assistants" which had gradually sprung up and usurped the government of the gilds.[1] Through the slackness, or ignorance, or indifference of the members of the Company, this usurpation was, in the year 1745, allowed to receive the sanction of Parliament by the Act (18 Geo. II., c. 15), which at once dissolved the union of the Companies of the Barbers and the Surgeons of London, and instituted the Corporation of Surgeons of London. The grievance did not, however, reach its culmination till the granting of the Charter of the year 1843 (7 Victoria), when the ancient right of eligibility to sit in the Council was, suddenly and without leave asked, taken away from all Members of the College who were not thereby created Fellows, or who should not subsequently become Fellows. This unnatural and enforced disability provoked the indignation of all other Members; and the present agitation, which began nearly five years ago, when the Council first sought to obtain certain alterations in the Charters, is only a late manifestation of an abiding resentment. No candid person, whether he sympathises or not with the aims of the Members to obtain a substantial share in the management of the College, can disregard these considerations.

The pleas which have been urged in support of the claims of the Members are chiefly three in number: first, prudential and political; second, legal; and third, historical. The first of these has been fully and elaborately set forth in various writings, and in the discussions which have taken place at the College and elsewhere, and the second is about to be argued in fit form in a court of law. But, notwithstanding all that has of late been said and written, the third plea has not yet received that amount of attention which its weight and importance deserve. Viewed from the historical standpoint, the demand now being made by the Members is not for the acquisition of new privileges, but for the restitution of ancient rights and liberties. And in order to appreciate the grounds of this demand it is necessary to have some knowledge not only of the circumstances which immediately preceded and led up to the establishment of the present College, but also of the history and constitution of the several gilds and corporations from which the College has sprung.

Though a Gild of Barbers practising surgery existed in the City of London as early as the beginning of the fourteenth century, it did not attain to the rank of a company till many years later. In the year 1461 the freemen of the Craft of Barbers using the mystery of surgery were, by Letters Patent granted by Edward IV., made "one body and one perpetual fellowship or community." The masters or governors of the Company were to be elected annually from and by the fellowship; and the masters *and the community* were empowered as oft and whenever need be to "make honest and lawful assemblies of themselves," and also "ordain and make laws and ordinances."

In the year 1540 by Act of Parliament (32 Henry VIII., c. 42), "every person" in this Company of Barbers of London, and all the members of a Company of Surgeons of London, were united and made one body corporate and one commonalty perpetual, by the name of

[1] Brentano: The History and Development of Gilds, in "English Gilds," published by the Early English Text Society. London, 1870, pp. cxlviii. *et seq.* See also two articles published in THE LANCET on October 30th and December 11th, 1886, respectively, tracing the connexion between the history of the various surgical corporations which preceded the Royal College of Surgeons and that of the principal craft gilds.

Masters or Governors of the Mystery and Commonalty of Barbers and Surgeons of London, "to the intent that, by their union and often assembly together, the good and due order, exercise, and knowledge of the science or faculty of Surgery should be" more perfect. The members of the United Company were to enjoy all the benefits, liberties, franchises, and other privileges at any time given or granted to either of the old companies.

The union of these two Companies was dissolved in the year 1745 by an Act of Parliament (18 Geo. II., c. 15), which enacted that those members of the United Company who had been admitted surgeons should be made "a separate and distinct body corporate and a commonalty perpetual," called by the name of Master, Governors, and Commonalty of the Art and Science of Surgeons of London. The officers were to be a master, two wardens, ten examiners, and twenty-one assistants. The master and wardens and examiners were to be elected by and out of the Court of Assistants, but vacancies in the Court of Assistants were to be filled up by persons chosen "out of the freemen of the Company." Though, as already hinted, the master, governors, and assistants were empowered to hold courts, make bye-laws and ordinances, the commonalty was in other respects to enjoy the same liberties, privileges, and franchises as by any former Acts and Letters Patent given, granted, or confirmed.

This Act of 1745 has never been repealed. And as this circumstance has a direct bearing upon the present controversy, it should be particularly noted that by the nineteenth section of the Act it was enacted that the sum of £510, vested in the United Companies of the Barbers and Surgeons, and given to the United Companies by Edward Arris for the use of public Anatomy Lectures on Muscles, and an annuity of £16 bequeathed to the United Companies by John Gale for one Anatomy Lecture, should "be vested in, and be deemed the sole property, estate, and effects of the Company and Corporation of Surgeons, established and incorporated by this Act," to be held in trust for the purposes intended by the donors thereof respectively. It is important to keep these settlements well in mind, inasmuch as the trusts which were then vested in and became the sole property of the Corporation of Surgeons have in some way fallen into the hands of the Council of the present College, which now uses and administers them. It will be interesting to learn by what arguments the Council will justify its administration of these trusts, at the same time that it must show that the constitution of the present College is regulated, not by the Act of Parliament of 1745, but by a Charter granted nearly a hundred years later, and which is in many respects at variance with the Act.

It is true that the preamble of the Charter of the year 1800 assumes that the old Corporation of Surgeons "hath been and now is dissolved"; but this assumption will scarcely condone the usurpation of trusts otherwise settled by law. It is nevertheless true that the ostensible reason for establishing the present College was the alleged dissolution of the old corporation; and it is necessary to recall the manner and circumstances in which the dissolution is said to have taken place, and the incidents which immediately followed, in order to understand the progress of subsequent events.

The third section of the Act of 1745 enacted that for the constitution of a legal court the master and the two governors, or any two of them, with nine of the assistants, should be present. It happened, however, at a meeting held on July 7th, 1796, that in consequence of the death of one governor and absence through illness of another, no legal court was possible; but, notwithstanding this, the master and some of the assistants determined to transact business. "The Company soon found that they had got into a very serious scrape, and on laying a case before counsel there was no doubt that their corporation was destroyed by the illegal construction of the Court of Assistants."[2] In the following year a Bill was introduced into Parliament at the instigation of *eleven* persons, members of the Court of Assistants, with a view to indemnify the Court and to legalise several of its unlawful transactions, as well as to procure a re-establishment of the corporation under the name of a College. The Bill had passed through the House of Commons and had been twice read in the House of Lords before the members of the corporation were aware of its purport. A petition against the Bill was thereupon presented to the House of Lords by 178 members of the corporation, stating that the promoters of the Bill had not convened the members of the corporation for the purposes of discussing the Bill and its clauses, or given any notification in any form that such a measure was contemplated. The petition further alleged that the master, wardens, and assistants of the Company had, without the knowledge or consent of the commonalty, made purchases greatly beyond the extent allowed by law, that by the Bill the ancient privileges of the Members would be annihilated, and that their right of meeting in a general court would be taken away, and that the Court of Assistants would be able to oblige members of the corporation to swear to the observance of such laws as the Court might make, although the Members themselves would have no voice in the making of the laws and no choice in the appointment of those who should make them.[3]

On June 19th, 1797, the petitioners against the Bill were heard by counsel, who declared that if the Bill became law "all the concerns of the corporation would be laid prostrate at the feet of" the Court of Assistants.[4] On July 17th, the day fixed for the third reading, Lord Thurlow rose to give his dissent. He described the Bill as one of "shift and contrivance," and stated that the conduct of those who promoted the Bill merited no small degree of disapprobation. He added that when he first attended the committee on the Bill, he was "astonished to find them engaged in profound discussions on aristocracy, democracy, and all the learned terms which were employed in speculative policy. The opposers of the Bill were stigmatised as Jacobins. ..... For his own part, he did not like Jacobins, but he saw no reason why people should be called Jacobins who merely wished to protect their property and to guard themselves against measures which they deemed to be injurious."[5] The Bill, he said, "went to invest the funds of the corporation in a committee of twenty-one persons. The parties opposing the Bill therefore had an obvious right to oppose it, and he was convinced that the House would never transfer—to use no harsher term—the property of men without their consent."[6] The principal supporter of the Bill was the Bishop of Rochester, who said "he thought that he perceived an equalising spirit at the bottom of the opposition to this Bill. He thought Democracy a monster that ought to be unkenneled from its lurking places and hunted down wherever it could be found. It was a monster which in these times ought to be extinguished in the birth." There were, however, "parts of the Bill to which he could not agree. He confessed himself unfriendly to the idea of investing twenty-one members with an absolute dominion over the property of the whole corporation." "The question was put and carried without division that the further reading of the Bill be postponed to this day three months."[7]

So scandalous were the disclosures which had been made, and so strong had the opposition become, that the Court of Assistants never again summoned up enough courage to apply to Parliament. But it occurred to a member of the Court that "a Charter from the Crown will be preferable to a Bill in Parliament." A petition for this purpose was accordingly presented to the King through the Duke of Portland, and a draft of the intended Charter was submitted to the consideration of the Attorney and Solicitor-General. Some opposition, however, was made to this proposal, for a "caveat was lodged by a committee of members who had opposed the late Bill," but it was unsuccessful.[8] A Charter was granted on March 22nd, 1800, reinstating the Company in its former position, and constituting it a College by the name of the Royal College of Surgeons in London.

This Charter contained many of the provisions to which the petitioners against the late Bill had most strongly objected, and in consequence of which the Bill had been thrown out. Of these, the provision precluding Members from a voice in the government was especially obnoxious. But even by this Charter Members (Fellows did not come into existence till forty-three years later) were left in the undisturbed possession of the inherent right of being eligible to be appointed to the governing body, and by implication to the office of president. The right was, however, as already stated, taken away by the Charter of 1843 (7 Victoria),

[2] J. F. South: Memorials of the Craft of Surgery in England. London, 1886, p. 291.

[3] John Ring: Reflections on the Surgeon's Bill. London, 1798, pp. 65–69.

[4] The Parliamentary Register of the House of Lords. London, 1797, vol. iii., p. 219.

[5] Ibid., p. 227. [6] Ibid., p. 229 [7] Ibid., pp. 230-1.

[8] South, op. cit., p. 295 et seq.

which instituted the order of Fellows and practically settled the present constitution of the College.

There is so much to be said in praise of the institution of the Fellowship as an academical distinction, that it is easy to overlook the needless injustice wrought by the manner of its institution in abolishing the constitutional rights of Members, already reduced almost to vanishing point. That the exclusive electoral and political privileges attached to the Fellowship were not considered as essential to the value of the diploma as a mark of exceptional surgical culture and attainments is shown by the fact that the electoral power has throughout been restricted to the smallest possible limit by the requirement of compulsory personal voting. Hitherto less than one-fourth of the total number of Fellows have voted at the elections of members of Council. Sir Benjamin Brodie is credited with being the promoter of the order of Fellows, and in the account which he has given of the reasons for establishing this order not a word is said about a suffrage or a franchise. "The object of this institution is," he says, "to insure the introduction into the profession of a certain number of young men who may be qualified to maintain its scientific character and will be fully equal to its higher duties as hospital surgeons, teachers and improvers of physiological, pathological, and surgical science afterwards."[9] It is surely not beyond the powers of medical statesmanship to devise a scheme by which these objects may be secured without perpetuating hateful and unjust political distinctions between Fellows and Members.

Many persons now living can recall the widespread disapprobation which the electoral clauses of this Charter provoked. Indignation meetings were held in London, at Colchester, at Shrewsbury, in Gloucester, and many other places, denouncing the Charter and demanding its withdrawal. Some idea of the prevailing sentiment may be gathered from the following forcible expression of editorial opinion (THE LANCET, vol. i. 1843-44, p. 125): "Without hesitation, we declare our belief that a more mischievous, a more iniquitous Charter never was honoured with the sign manual of the Crown. ..... We shall find little difficulty in establishing the fact that it was obtained from the Executive Government—as was the Charter of 1800—by MISREPRESENTATION and FRAUD."

London, March 12th, 1889.

[9] Autobiography, in works edited by C. Hawkins. London, 1865, vol. i., p. 108.

Pharmacology and Therapeutics.

THERAPEUTICS OF BISULPHIDE OF CARBON.

SOME observations on the employment of bisulphide of carbon, made chiefly in the Purísima Hospital, Santiago, S.A., are published in the *Revista Médica de Chile*, and show that this unpleasant remedy may have more therapeutic power than it is usually credited with. It has occasionally been employed in this country for diarrhœa, and externally for ulcers. Sapelier also employed it with apparent advantage in typhoid fever, and it has been recommended in diphtheria and other diseases in which micro-organisms occur. The Chilian cases referred to included one of acute and one of chronic dysentery, one of atonic dyspepsia, one of simple gastric ulcer, and one of typhoid fever. The dose given was generally about two ounces of a saturated solution of the bisulphide in water, mixed with half a tumbler of milk or a little syrup, taken half an hour or so before meals. This very quickly relieved the pain and tenesmus. In the typhoid case, which occurred in a child of ten (not a hospital patient), whose condition was becoming alarming, enemas of a pint of water, containing about half a drachm of bisulphide of carbon, were given, in addition to the internal administration of iodide of potassium and kairin. The diarrhœa diminished, the stools rapidly lost their offensive character, the gurgling disappeared from the iliac region, and the patient made a good recovery.

ADONIS IN HEART DISEASE.

Dr. Thos. Oliver (*Therapeutic Gazette*) has been employing adonidine in cases of mitral and aortic regurgitation, and has found that it always relieves præcordial pain, palpitation, and dyspnœa. Mostly there was great general improvement, fewer complaints being made of palpitation, of painful contractions, or of headache. He has employed it in chloroform water in the dose of a milligramme four times a day. He found that larger doses were not well borne, at least at the commencement. The quantity of urine passed was increased, although Dr. Oliver believes that this resulted from the action upon the heart rather than from special diuretic action. In his experience the drug did better in cases where the aortic insufficiency was due to valvular rupture or to chronic endocarditis, than when it was owing to rheumatic endocarditis. According to P. Marfori and Borgiotti, adonis possesses much stronger diuretic properties than adonidine, but the action is only manifest some days after the administration. They have further noted that under its influence the urine acquires a deep yellow orange colour, which persists a few days after the drug is no longer given. They believe that adonis is most serviceable in cases of heart disease accompanied with marked venous engorgement, when it is desirable to regulate the work and produce prolonged diuresis. In their investigations they employed the adonis æstivalis, which is more common in Italy than adonis vernalis, and is distinguishable by having much smaller flowers. They have given daily from four to eight grammes in infusion, but have also used much larger doses without any ill effects, provided that there is free renal excretion.

HYPODERMIC INJECTIONS OF ARSENIATE OF STRYCHNINE IN PHTHISIS.

An American treatment of phthisis, consisting of injections of arseniate of strychnine at the level of the diseased portion of the lung, has recently been employed, with some misgivings however, by Dr. Pinnoy at the Stuyvenberg Hospital, Antwerp, on four cases of phthisis, all in the second stage. The preparation used was a ½ per cent. solution in liquid vaseline. Of this from four to fifteen minims were injected daily as a rule. After a week or two of this treatment all the patients were greatly improved, even the bacilli disappearing from the sputa in two instances. As, however, the injections seem to have been commenced almost immediately after admission, it is not possible to determine how much of the amelioration should be ascribed to the rest, food, and general care. The injections appeared, it is true, to give relief to the symptoms from the first time they were used, and so there is some reason to think that they were the most important factors in the cases.

ANTIPYRIN ERUPTION.

A correspondent informs us that a gramme dose of antipyrin, procured in Seville, while rapidly relieving some supposed rheumatic pains, produced in four hours a puffy condition of the face and lips, speedily giving place to large blisters, which broke in the course of twelve hours. In the same patient previous use of the drug had been followed by the appearance of a rash, distributed over the trunk and limbs. The condition of the face above described is a very unusual result of antipyrin, which, when producing an erythematous rash, ordinarily spares the face and neck. It is possible that an attack of facial erysipelas was wrongly ascribed to the use of antipyrin.

GELOSINE FOR TENTS.

An admirable substitute for laminaria seems to have been found in gelosine, which is exceedingly malleable; so that it can be made to adapt itself easily to any space or canal, such as that of the cervix uteri. When it is brought into contact with moisture, it increases to three times its former volume. Antiseptics or styptics, such as iodoform or gallic acid, can be mixed with it. It has been used in stricture of the nostrils, of the meatus of the ear, and of the cervix uteri; and it is hoped that a means may be found for utilising it in those of the urethra. The results obtained by its employment are, so far, most satisfactory.

OPENING A WORCESTERSHIRE HOSPITAL.—A new hospital was opened on Tuesday last by the Rural Sanitary Authority of the King's Norton Union at West Heath, near King's Norton, Worcestershire. It is intended for the treatment of small-pox, scarlet fever, and other cases of infectious disease occurring within the district of King's Norton Rural and Sanitary Authority. In addition to adequate accommodation for the requirements of the district, there is a ward set apart entirely for treatment of private cases. The disinfecting arrangements are very complete.

THE DETECTION OF HUMAN BLOOD.

A HIGHLY instructive paper on the above subject was read on March 13th at St. Thomas's Hospital, before the members of the Metropolitan Police Surgeons' Association, by Dr. COPEMAN, demonstrator of physiology and morbid anatomy at St. Thomas's Medical School.

Before discussing in detail the methods of procedure which had led to very important conclusions as regards the identification of human blood, Dr. Copeman drew attention to the various tests for blood in general. In the first place, he stated that, as there were no chemical tests for blood as such, the observer had to resort to the microscope to furnish evidence of the presence or absence of the coloured corpuscles. Enumerating, then, the conditions under which it might be found impossible to identify the corpuscles, he proceeded to inquire into the tests which could be applied to the colouring matter. These tests he divided into (1) chemical, (2) microscopic, (3) spectroscopic. The guaiacum test was shown to be readily applicable and trustworthy within certain limits, but, inasmuch as the colour reaction might be given with milk, pus, and urine, it could not be accepted without corroboration. Attention was drawn to the fact that sometimes white blotting paper gives a blue colour without the addition of blood, in which case Dr. Copeman said that the test must be discarded as useless. We are not able, however, to unconditionally accept this conclusion, seeing that on the same piece of paper it is possible to conduct a check experiment. We can first ascertain if the blue colour is given without blood, and if this is found to obtain, we can employ the reagents on the same slip of paper with the addition of a drop of a very dilute solution of blood-colouring matter. It will then be seen that the deep blue stain in the latter cases stands out prominently in comparison with the lighter tint in the former. Dr. Copeman spoke of the possibility of mistaking for blood the red stain—e.g., that which might be found on linen through a red scarf having been worn upon a part bathed with perspiration. We would emphasise this by saying that occasionally sweat is actually charged with colouring matter of the blood, so that a false assumption might be made in either direction. According to Dr. Copeman, the best method of obtaining *hæmin* crystals from a small stain is by dissolving the colouring matter in glacial acetic acid without the aid of other solvents, and then, if the stain be an old one, adding a crystal of sodium chloride. Having heated the solution in a watch-glass, over which another glass has been inverted, to such a degree that the edges of the glasses are not too hot to be held between the fingers, a drop is placed upon a slide and covered with a slip. The crystals thus obtained are mostly in oblique rhombic prisms, but occasionally they are oval, and unlike crystals of uric acid as deposited in urine; but whereas hæmin crystals are dark-brown in colour, those of uric acid are orange. We entirely subscribe to the contention of Dr. Copeman, that for medico-legal purposes no reliance can be placed upon the relative size of hæmin crystals obtained from human blood and those derived from that of other animals, for in each instance the size is subject to great variation, and depends largely upon the conditions under which the crystals are prepared as regards the strength of the blood solution, the relative quantities of the reagents, and the temperature to which the fluid is subjected, re-crystallisations giving larger and larger crystals. The colouring matter in the feathers in the Cape lory is said to give a spectrum similar to that of oxyhæmoglobin, but then it fails to yield the absorption bands of the most characteristic of blood spectra — viz., that of *reduced hæmatin*. Reverting to the aid to be derived from the microscope, Dr. Copeman avowed his agreement with what had been written in the pages of THE LANCET upon the unreliability of the size of the red corpuscles as evidence of absolute distinction between human blood and that of other mammalia. In the first place, the corpuscles in some animals too nearly approached in size human blood corpuscles. Moreover, the size of the corpuscles in any animal varied to some extent as the specific gravity of the blood, and this was shown to extend over a considerable range even in fresh healthy blood, whilst it was subject to even greater change in disease. Again, the treatment of old stains for the purposes of observation could not be carried out to such a nicety as to exactly reproduce the effects upon the red corpuscles as obtains in the serum of recently drawn blood. And finally, the corpuscles may break up in a few days, so that the question of their recognition and identity cannot be entertained. As yet the microscope enables us only to determine with certainty whether the blood is mammalian or not. For a long time it was taught in our physiological text-books that the *hæmoglobin* of human blood could not be crystallised. The observations of Dr. Copeman, Mr. Bond of Leicester, and others prove that this is contrary to fact. Some time since Dr. Copeman showed that the hæmoglobin of the blood, taken from patients suffering from pernicious anæmia, crystallised in from ten to forty-eight hours. Curiously, it was demonstrated that, if arsenic were given to the patients for a few days, the hæmoglobin no longer underwent crystallisation, and that with a discontinuance of the treatment the phenomenon reappeared. Another observer has proved that human blood taken from the stomachs of leeches which have fed upon it will crystallise. It is true the order—as regards appearance—of crystallisation varies in different animals; thus it occurs more quickly in the rat, guinea-pig, and squirrel, than it does in the cat, dog, horse, and man. Much information may be obtained from the use of the micro-spectroscope, and indeed the instrument is essential to the demonstration of Dr. Copeman's discovery to be mentioned presently. Dr. Copeman prefers Zeiss's instrument to any other, as it gives a comparison spectum, and also a scale of wave lengths for localising absorption bands. Exposure to air turns hæmoglobin to meth-hæmoglobin. The spectrum of oxyhæmoglobin, or that of fresh blood, shows two absorption bands, whilst in meth-hæmoglobin there is only one band on the red side of D, a great part of the blue end of the solar spectrum being obscured. It is this meth-hæmoglobin spectrum which is generallly obtained from old blood stains. Reduction agents convert meth-hæmoglobin into reduced hæmoglobin the spectrum of which has one broad absorption band between the D and E lines. The best spectrum given by blood is yielded by reduced *hæmatin*. To the blood solution add a drop of a saturated solution of hyposulphite of soda: this gives reduced hæmoglobin. If then a few drops of a strong soda solution be added, the result is *reduced alkaline hæmatin*, the spectrum of which shows two absorption bands, one well marked between D and E, the other shows but slightly in weak solutions. Heated to 50° C. the absorption bands vanish and reappear on cooling. Agitation of the fluid with air causes the bands to disappear, but a further addition of sodic hyposulphite accounts for their return. This spectrum can be obtained from putrid blood. Mr. Bond of Leicester demonstrated that putrid human serum caused the hæmoglobin to crystallise, and that the spectrum of such crystals was the spectrum of reduced hæmoglobin, and not oxyhæmoglobin. The colour of the reduced hæmoglobin crystals obtained from human blood is pink or pale claret if the layer be fairly thick, but is of a greenish colour if the film be thin. Dr. Copeman corroborates Mr. Bond, and says that in human blood the crystals are always those of reduced hæmoglobin (the question of hæmin crystals is not now being considered), in whatever way they are prepared, whether by the addition of decomposed serum, hydrocele fluid, or ether to the blood. Monkey's blood crystallises exactly as man's as regards the state of oxidation of the hæmoglobin; whilst, so far as Dr. Copeman's experiments go, this obtains in no other animal. Thus, then, we appear to have a most important aid in the differentiation of human and monkey's blood from that of other animals. Monkey's blood crystallises less easily with decomposing serum added than does human blood. Human hæmoglobin crystallises in rectangular plates. In monkeys' the crystals are diamond-shaped, or six-sided. We may here quote *verbatim* a passage from Dr. Copeman's paper. "The blood of many animals, however, particularly those which come under the term 'domestic,' altogether refuses to crystallise by the method that has been advocated for human blood, and consequently unless we can control such negative experiments with some of a more positive kind, it would obviously be unfair to form any definite opinion upon the results obtained. For although if we find that crystals are formed, and that they consist of reduced hæmoglobin, we may say, after excluding the possibility of the blood being that of a monkey, that it undoubtedly is human; still, on the other hand, if crystals are not obtained, it would, in the absence of evidence to the contrary, be unsafe to assert positively that it was not

human." Fortunately, by Gamgee's method, modified somewhat—treatment with ether—the blood of all animals crystallises with certainty. The form of the crystals in all other animals than man differs from the rectangular prisms derived from human blood, and they always consist of oxyhæmoglobin; whilst, as Dr. Copeman has proved, in man and in the monkey they are formed of *reduced* hæmoglobin. This method then of treating the blood with ether is the one to be adopted in the procedure whereby it is sought to differentiate human and monkey's blood from that of other animals. As a positive experiment human blood may be made to crystallise. (1) By the addition of decomposing serum; (2) treatment with solution of bile salts; (3) agitation with ether; (4) semi-digestion in the stomach of the common leech. Of these, the first is to be recommended as the best method. The above experiments refer to crystallisation of comparatively fresh blood, but Dr. Copeman sees no reason why similar results should not be obtained from old stains &c., since in such stains, after the oxyhæmoglobin has been spontaneously converted into methhæmoglobin, no further change may occur.

Space does not admit of our doing full justice to Dr. Copeman's exhaustive paper, but enough has been said to show that it is by no means improbable that his discovery may prove a most important step in the direction of supplying an answer to the oft-repeated question in courts of law—"Did the stain consist of human blood?" For our own part, we trust that it may be so, and that ere long, as a result of further observation and experiment, the point may be definitely decided.

After the reading of the paper, a discussion ensued, in which Mr. T. Bond, Mr. Pepper, and others took part. The meeting concluded with a vote of thanks to the chairman, Mr. McKellar.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE twelfth annual meeting of the above Association was held on Saturday, March 16th, at the Medical Society's rooms, Chandos-street, Cavendish-square. Among those present were Prof. Alexander Macalister, F.R.S. (President); Dr. Richard Fegan (President-elect); Sir Thomas Crawford, K.C.B., and Dr. Macnaughton Jones (ex-Presidents); Director-General Dick, C.B., R.N., Professor Sibthorpe, H.M.I.A., Dep.-Insp.-Gen. Davis, R.N., and the two Hon. Secs. (Messrs. Stewart and Abraham). The out-going President having resigned the chair to Dr. Fegan (Blackheath), a vote of thanks to Professor Macalister was passed, the seconder of the resolution, Sir Thomas Crawford, reminding the members of the debt of obligation under which Dr. Macalister had placed the Association by his large-hearted hospitality on the occasion of the summer dinner in Cambridge last year. Dr. Robert McDonnell, F.R.S. (Dublin), was appointed President-elect, and Dr. W. H. White Honorary Treasurer. The following were elected non-official members of Council—viz.: Sir Thomas Crawford, K.C.B., Director-General Dick, C.B., Dr. Davison (Bournemouth), Messrs. W. H. Bourke, Gaven, Heath (St. Leonards), W. B. Johnston, Douglas Lithgow, Macalister (Cambridge), Mapother, Phillips (Reading), Gilbart-Smith, Waters (Chester), Charles Wells, and Gerald F. Yeo.

The annual report showed the Association to be flourishing both as regards numbers and the amount of money in the hands of the Honorary Treasurer. One foundation member (Dr. Hill Evans, of Bradford, Yorks) had died during the year, besides Drs. Charles Davidson and Walton Dwyer. The number now on the roll is 555, as against 517 on St. Patrick's Day, 1888. The usefulness of the Association in guarding the interests of Irish diplomates practising in England was shown by proceedings early in 1888 at the Bristol Royal Infirmary. It was proposed to add that institution—as the Liverpool one had been the previous year—to those English hospitals restricting honorary staff appointments to those holding certain English diplomas. The Association, however, promptly enlightened local public opinion on the true merits of the question, and the monopolists were signally defeated. The General Medical Council refused the request made last year by the Royal College of Surgeons of Ireland that official inspectors of their Fellowship examination as well as that for the licence should be appointed, it being held that such inspection would be *ultra vires*. In reference to this refusal the report says: "This official pronouncement being now on record, good grounds exist for asking Parliament to grant the General Medical Council requisite additional powers." A considerable part of the report was occupied with record of work done with the view of removing the disabilities of those who hold higher Irish diplomas and practising in England. This portion of the report concluded as follows: "With these facts before it your Council can only recommend the adoption in the immediate future of a policy of watchfulness, so that, in the event of restrictions being proposed elsewhere similar to those suggested last year at Bristol, active steps may be taken forthwith to prevent an injustice being done to the Irish diplomates in the locality, their qualifications being by such action inferentially depreciated."

Dr. MAPOTHER moved a resolution approving of the suggested "policy of watchfulness," and recommended that the Council might in addition address a letter of remonstrance to those Scotch colleges whose delay in making it necessary for candidates for higher diplomas to pass qualifying examinations (as was invariably the case in Ireland) had prevented the removal of the restrictions complained of.

Sir THOMAS CRAWFORD, in seconding the resolution, said that it would be well if the Irish colleges would publish far and wide that they were not tarred with the same brush as the Scotch colleges in this matter. As far as he in his official capacity could emphasise the superiority of the guarantees afforded by the possession of the higher Irish diplomas it had been done. The Army Medical Department had recently adopted the rule that the holding of a fellowship of any college should not be accepted in future as sufficient evidence of fitness for promotion unless the department were satisfied as to the searching nature of the requisite examination.

Mr. GEORGE STOKER said that the fact of the Great Northern Hospital having recently repealed the restrictive rule would prove to the Council that if they put before the subscribers to charitable institutions as clearly as Mr. Stewart had in Bristol the unfairness of such monopoly, they would be as willing in London as they had been in the West Country to do justice to Irish diplomates.

The resolution was adopted unanimously.

It was announced that the summer provincial dinner would take place this year at Manchester, on Wednesday, June 19th.

Votes of thanks having been passed to (1) the conversazione and other reception committees; (2) the medical journals for publishing their proceedings, and for their support in the contest being carried on against hospital monopoly; and (3) the directors of the General Apothecaries' Company for having granted them the use of their boardroom for meetings previously to their becoming tenants of the Medical Society, the meeting terminated.

The members and their guests to the number of ninety-three dined together the same evening at the Holborn Restaurant. There was a large number of ladies among those present. The usual loyal toasts were duly honoured, the whole company singing "God Save the Queen." The toast of the "Guests" was proposed by Professor Macalister, F.R.S., and responded to by Mr. Robert Anderson, LL.D. "Success to the Association" was proposed by Mr. Sala, and the health of the officers was proposed by Dr. Robt. Barnes. Irish melodies and other songs enlivened the proceedings.

THE MANCHESTER "CAB MYSTERY."

AT the Liverpool Assizes, on Monday last, the trial was commenced, before Mr. Justice Charles, of Charles Parton, aged eighteen, who was indicted for the wilful murder of John Fletcher by administering to him chloral. The case excited great interest, partly from the social position of the deceased, partly also from the extraordinary surroundings of the case. The deceased was a retired paper manufacturer, residing in Southport, and had very shortly before his death been elected a member of the County Council there. On Feb. 26th last, he, being then in his usual health, went to Manchester, visited his office, and saw his nephew, who had succeeded him in his business. After some conversation, he left about 1.30 P.M., saying that he was going to the Mitre Hotel, near the Cathedral,

Manchester, to witness the sale of a mill. According to the nephew's evidence, he was said to be suffering slightly from heart disease, he occasionally got drunk, and was of a generous disposition. Another witness who knew him well described him as "a very nice fellow—genial, good-tempered, and agreeable to everybody." From his leaving the office at 1.30 until nearly 5 o'clock his movements do not appear to be known, but at that time he was seen at the Mitre Hotel by several friends, who stated that he was in his usual health. According to one of them he was under the influence of liquor, while another described him as sober. It was clear that while he had undoubtedly been drinking, he was in full possession of his faculties. After being some time at the hotel, and having had a "social glass," he left, saying that he was going to a shell-fish stall which he named. He was seen outside the stall by the proprietor, who knew him well. It was then about twenty minutes to seven, and the deceased was alone, but afterwards witness saw him fall into conversation with a young man. The deceased was then wearing a valuable gold watch and heavy gold curb chain. About this time (6.40 P.M.) the deceased and prisoner were seen together by a police-constable on duty near the Cathedral, and the former was heard to say "get me a cab," or "I will have a cab." A cab was hailed by the prisoner; both he and deceased got into it and drove to the "Three Arrows," a public-house in Deansgate. The deceased got out of the cab without difficulty, and went into the house with the prisoner; both remained there for an interval variously stated as from ten to twenty minutes. Within the public-house the prisoner was seen by a witness to empty the contents of a small round bottle about an inch and a half long into his own glass of beer. He also observed him holding the two glasses as if looking through them; he then put them down and was not seen to change them. They left together, and another witness who knew Mr. Fletcher well said he looked "gassed"—that is, quite unlike himself. The prisoner and deceased entered their cab again, and the former directed the cabman where to go, but he was obliged soon to proceed at a walking pace in consequence of a procession. Immediately after he had passed this, his attention was called by a passer-by to the fact that the cab door was open and that the old gentleman was its only occupant, the prisoner having escaped. The deceased was sitting on the back seat with his head resting on the front seat. The cabman and another man tried to rouse the deceased from what appeared to be insensibility, but he told them to mind their own business. The same policeman who had previously seen him was called, and he noticed that his vest was open and his shirt exposed; his watch, chain, and purse were missing. He tried to arouse him, and presuming him to be drunk he was taking him to the police station, but on the way he directed the driver to go to the Royal Infirmary. The deceased gave a sigh as they reached there exactly at 8 o'clock, but was quite dead when seen by Dr. J. H. Parker, the resident surgeon on duty. There was no odour of chloral, or indication of corrosive poisoning, or any of the accompaniments of syncope from heart disease. The post-mortem examination was made in Dr. Parker's presence by Dr. E. Septimus Reynolds. The brain was congested. The heart was the subject of slight fatty degeneration; its cavities contained fluid blood, but no clots. The lungs were congested, but normal, and the left pleura showed signs of old inflammation. The stomach was slightly congested, and contained about a gill of yellowish fluid which smelt strongly of beer; the intestines were healthy, and filled almost to the end with a gruelly fluid smelling strongly of alcohol; there was very little solid matter. The liver was much enlarged, weighing 7lb., and was indicative of previous intemperance. The other organs were healthy, and, as there was nothing to account for death, the stomach, intestines, and some blood from the abdominal cavity were sent to Mr. Charles Estcourt, the city analyst, who found indications of the presence of chloral in the stomach and intestines, but not in the blood. After distillation he made three tests, and satisfied himself of the presence of chloral. Dr. Julius Dreschfeld, physician to the Manchester Royal Infirmary, who had studied the case, examined the viscera, and made experiments with chloral in beer, gave as his opinion that the cause of death was syncope due to the combined effects of chloral and alcohol on a system already diseased by the long-continued use of alcohol. It was also proved that on Feb. 19th the prisoner called on a Liverpool chemist, and asked for forty grains of chloral, which were refused without a prescription; but while the witness was weighing ten grains, the prisoner reached over the counter, seized the chloral bottle, and ran off. After his escape from the cab he was found to be wearing a gold watch and chain, and two sovereigns were found concealed in his bed. The trial lasted during the whole of Monday and until Tuesday afternoon. The prisoner was very ably defended, but he was found guilty and sentenced to death.

ROYAL COLLEGE OF SURGEONS:

FORMULÆ FOR NEW BYE-LAWS.

THE Secretary of the Royal College of Surgeons, on behalf of the Council of the College, has forwarded to the Home Secretary for sanction and ratification a memorandum containing formulæ for new bye-laws as signed and ordained by the Council. In this memorandum Sections 4, 5, 8, 10, 12, 16, 19, 24, and 26 of the old bye-laws are abrogated and annulled, and are replaced by new bye-laws containing modifications or addenda. Section 23 of the old bye-laws, having reference to examinations in midwifery, is annulled altogether. Section 8 of the new bye-laws, having reference to the election of examiners, provides that when no candidate obtains an absolute majority a second ballot shall take place, the candidate at the bottom of the poll at the first ballot being omitted, and if then no candidate shall have obtained an absolute majority of votes there shall be a third ballot, omitting the candidate obtaining the smallest number of votes at the second ballot, and so on by a process of exhaustion until some candidate shall have obtained an absolute majority.

The clause in Section 8 of the old bye-laws, enacting that every person elected to be a member of the Court of Examiners is to pay, prior to his first admission, 20 guineas, is omitted in Section 8 of the new bye-laws. Section 12 of the new bye-laws, dealing with the election of President and Vice-Presidents, enacts that where a candidate does not obtain an absolute majority at the first ballot, a process of exhaustion shall be carried out similar to that provided for in Section 8. New Section 24 enacts that the College accounts shall be audited at least once a year by a professional auditor.

At a meeting of the Birmingham and Midland Counties Branch of the British Medical Association held on the 14th inst., the following resolution was moved by Mr. L. Tait:—"That this Branch heartily approves of the principle of the Bill about to be introduced into the House of Commons, by which it is proposed to restore to the Members of the Royal College of Surgeons the full and unrestricted exercise of their ancient corporate rights and privileges." An amendment "that this meeting proceed to the next business" was moved by Mr. F. March and carried.

PROFESSOR GERHARDT OF BERLIN IN LONDON.

A VERY large and representative meeting of the medical profession, of a social and informal character, assembled at the house of Sir Andrew Clark on Tuesday night last. The occasion of the meeting was the presence in London, for the purpose of taking part in a consultation, of Professor Gerhardt, the distinguished Rector of the University of Berlin, and surgeon to the late Emperor Frederick. The house of the hospitable President of the College of Physicians was simply crowded by men of all the medical schools in London, and men in all branches of practices; and the provinces were not without their distinguished representatives. The gathering was the more significant, inasmuch as it was extemporised at a notice of a few hours. Prior to this reception by Sir Andrew and Lady Clark, a select company was entertained by them at dinner, including Professor Gerhardt, the toast of whose health was received with the greatest enthusiasm. The Professor replied with admirable taste, and without any direct allusion to the historical events in which he played so important a part. The learned Rector and Professor was obviously much impressed with his reception, as well he might be. He will return to tell his countrymen of it, and it is not too much to say that the report must satisfy them that the

profession in England regard them with unabated respect, and will not cease to labour for the maintenance in all time of those friendly relations and rivalries which have done so much for the advance of the art and science of medicine in both countries and in the world generally. We append the names of some of those who were present on the occasion, which will not be soon forgotten by all who were privileged to witness it.

Amongst those who met Dr. Gerhardt either at dinner or at the reception were the following:—

Dr. Theodore Acland.
Dr. Clifford Allbutt.
Dr. Allchin.
Dr. James Anderson.
Dr. John Anderson.
Dr. Barlow.
Dr. Barnes.
Mr. Barwell.
Dr. Bastian.
Dr. Beevor.
Dr. Hughes Bennett.
Dr. Biss.
Dr. Black.
Dr. Bowles (Folkestone).
Dr. Brachet.
Dr. Broadbent.
Mr. Buckston Browne.
Dr. Burnet.
Mr. Butlin.
Dr. Buzzard.
Dr. Carter.
Dr. Champneys.
Mr. Watson Cheyne.
Dr. Coupland.
Sir William Dalby.
Dr. Daly.
Dr. Delépine.
Dr. Dick, Director-General, R.N., C.B.
Dr. Dickinson.
Dr. Draper (of New York).
Sir Dyce Duckworth.
Mr. Durham.
Dr. Eastes.
Dr. Ewart.
Sir Joseph Fayrer.
Dr. Fearnside.
Dr. Bedford Fenwick.
Mr. E. Hurry Fenwick.
Dr. Finlay.
Dr. Kingston Fowler.
Dr. Galabin.
Dr. Garrod.
Dr. Gervis.
Dr. Glover.
Dr. Glynn.
Mr. Godlee.
Dr. Goodhart.
Mr. Pearce Gould.
Dr. Gover.
Dr. Green.
Dr. Dormer Harris.
Dr. Heron.
Dr. Herringham.
Mr. Berkeley Hill.
Mr. Horsley.
Mr. Hulke.
Dr. Handfield Jones.
Mr. Keetley.
Dr. Percy Kidd.
Mr. Langton.
Dr. Robert Lee.
Sir Joseph Lister.
Dr. Liveing.
Sir William Mac Cormac.
Mr. McCarthy.
Dr. Maguire.
Mr. Howard Marsh.
Dr. Angel Money.
Dr. Norman Moore.
Dr. Alex. Morison.
Mr. Malcolm Morris.
Dr. Murrell.
Dr. Ord.
Dr. Ormerod.
Sir James Paget.
Mr. Stephen Paget.
Mr. R. W. Parker.
Dr. Pavy.
Dr. Playfair.
Dr. Priestley.
Dr. Radcliffe.
Dr. Ransford.
Dr. Russell Reynolds.
Dr. Roberts.
Mr. Rose.
Dr. Sansom.
Dr. Felix Semon.
Dr. Brodie Sewell.
Dr. Sharkey.
Mr. Sibley.
Dr. Skerritt (of Bristol).
Mr. Noble Smith.
Dr. Pye-Smith.
Mr. Thomas Smith.
Dr. Symes Thompson.
Dr. Thorne Thorne.
Mr. Knowsley Thornton.
Dr. Thorowgood.
Mr. Tomes, F.R.S.
Dr. Turner.
Dr. Warner.
Dr. Watney.
Dr. Weber.
Dr. Samuel West.
Dr. Whipham.
Dr. Hale White.
Dr. Wilks.
Dr. John Williams.
Dr. Theodore Williams.
Dr. Wooldridge.
Dr. Burney Yeo.

Expressions of regret were received from many gentlemen who, by reason of the shortness of the notice, were unable to meet Dr. Gerhardt; amongst them were the following:—

The President of the Royal College of Surgeons.
The President of the General Medical Council.
Dr. Bristowe.
Dr. Buchanan.
Mr. Brudenell Carter.
Mr. John Croft.
Dr. Matthews Duncan.
Dr. Edis.
Mr. Erichsen.
Mr. Warrington Hayward.
Dr. George Johnson.
Mr. Cripps Lawrence.
Mr. George Lawson.
Mr. Morton.
Mr. Nettleship.
Mr. Edmund Owen.
Mr. Page.
Professor Parker, F.R.S.
Dr. Pearson.
Dr. Julius Pollock.
Dr. Urban Pritchard.
Sir Edward Sieveking.

The crush having been so great, we must express our regret at being unable to supply a complete list.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Stroud Rural District.—No particular prevalence of infectious disease prevailed in this district except measles, which necessitated the closing of schools during the month of May. One diphtheria death occurred; but, as in so many other places, it was supplemented by a series of croup deaths, this term having been used on the ground that this disease is only a modified form of the other. According to this view, it would be far better to assign to the disease the name which is most likely to ensure precautionary measures, for many outbreaks of diphtheria owe their spread to carelessness following on neglected cases and deaths from so-called croup. The need for proper means of isolation is very urgently felt in the district, and it is to be hoped that the provision so strongly pressed by Mr. Partridge will be made in a permanent form. The village of Thrupp is in a very neglected condition, owing to want of proper drainage; but improvements are being effected elsewhere, and the water company have now made some 500 connexions. The death-rate for 1888 from all causes was 15·4 per 1000.

Bisley Urban District.—The only disease of any importance that prevailed in 1888 was scarlatina, of which 14 cases came under notice. Precautions were taken to prevent its spread, and Mr. Partridge secured the co-operation of the school authority in this matter without school closure being resorted to. The water company are extending their mains, and current sanitary work is maintained as to inspection of premises, trades, &c. The annual mortality from all causes during the year was 17·3 per 1000.

Torquay Urban District.—Mr. Paul Q. Karkeek asks the Local Board of Health to consider the expediency of including measles amongst the infectious diseases which should be notified, for in the absence of such notification he found himself last year unable successfully to check the spread of the disease. In some towns measles has thus been included as a temporary measure, and for a period of some five years, in order to judge as to the results. In a watering-place it is probably more important to control measles than it would otherwise be in a town of the size of Torquay. Public rooms, including schools, have been inspected with a view of seeing whether they were in such a sanitary state as to justify their use for their professed purposes, and certain defects which are doubly important when affecting crowded audiences were discovered. The hospital sanatorium has again been found useful, and the general death-rate for the year was 13·9 per 1000.

Watford Urban District.—The death-rate for Watford during 1888 was 17·2 per 1000. A slight outbreak of small-pox resulted in mild attacks in a few vaccinated persons, and death in two who were unvaccinated. Thirty cases of infectious disease were received into the joint hospital belonging to the urban and rural authorities, and all of them recovered. Schools, cowhouses, and sheds, and other similar premises have been kept under continuous supervision, and Dr. Brett asks that any information bearing on the health of milch cows in his district may be regularly supplied to him. Some day we may secure joint action between the veterinary and sanitary authorities in this respect.

Withington Urban District.—The death-rate for Withington during 1888 is calculated at 12·2 per 1000 living. The action taken to control the spread of infectious disease within the district is set out in detail by Dr. Railton, and this included removal of certain cases to Monsall Hospital, together with disinfection of dwellings and infected articles. The work undertaken towards improving the general sanitary state of the district included some substantial extension of sewers and a large amount of current abatement of nuisances, together with inspection of premises.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6177 births and 3893 deaths were registered during the week ending March 16th. The annual rate of mortality in these towns,

which had been 19·7 and 21·0 per 1000 in the preceding two weeks, further rose last week to 21·3. During the first eleven weeks of the current quarter the death-rate in these towns averaged 21·0 per 1000, and was 2·6 below the mean rate in the corresponding periods of the ten years 1879-88. The lowest rates in these towns last week were 14·0 in Sunderland, 16·9 in Oldham, 17·0 in Leicester, and 17·1 in Cardiff. The rates in the other towns ranged upwards to 27·8 in Manchester, 30·5 in Bolton, 32·5 in Preston, and 33·1 in Blackburn. The deaths referred to the principal zymotic diseases in these towns, which had been 432 and 431 in the preceding two weeks, were last week 434; they included 163 from measles, 105 from whooping-cough, 58 from diphtheria, 43 from scarlet fever, 35 from diarrhœa, 29 from "fever" (principally enteric), and only one from small-pox. No death from any of these principal zymotic diseases was recorded during the week in Wolverhampton, while they caused the highest rates in Salford, Bolton, Preston, and Blackburn. The greatest mortality from measles was recorded in Sheffield, Birkenhead, Huddersfield, Manchester, Bolton, and Blackburn; from scarlet fever in Blackburn, and from whooping-cough in Brighton, Blackburn, Plymouth, Cardiff, and Preston. The mortality from "fever" showed no noticeable excess in any of these towns. The 58 deaths from diphtheria in the twenty-eight towns included 31 in London, 5 in Salford, 3 Manchester, 3 in Preston, 2 in Liverpool, and 2 in Bolton. Small-pox caused 1 death in Portsmouth, but not one in any of the twenty-seven other great towns; and only 4 small-pox patients were under treatment at the end of the week in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital. The number of scarlet-fever patients on Saturday last in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 602, against numbers declining in the preceding sixteen weeks from 980 to 604; 52 cases were admitted to these hospitals during the week, against 41 and 64 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 362 and 402 in the preceding two weeks, declined again last week to 396, and were 153 below the corrected average. The causes of 73, or 1·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Portsmouth, Preston, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Hull, Sheffield, Halifax, and Brighton.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·2, 22·3, and 23·5 per 1000 in the preceding three weeks, further rose to 25·4 in the week ending March 16th; this rate exceeded by 4·1 the mean rate during the week in the twenty-eight large English towns. The rates in these Scotch towns last week ranged from 11·6 and 12·7 per 1000 in Leith and Perth to 28·3 in Paisley and 32·4 in Glasgow. The 650 deaths in the eight towns showed a further increase of 50 upon the numbers returned in the preceding three weeks, and included 45 which were referred to measles, 37 to whooping-cough, 10 to diarrhœa, 7 to diphtheria, 5 to scarlet fever, 2 to "fever" (probably enteric), and not one to small-pox; in all, 106 deaths resulted from these principal zymotic diseases, against 86 and 76 in the preceding two weeks. These 106 deaths were equal to an annual rate of 4·1 per 1000, which exceeded by 1·7 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 41 and 26 in the preceding two weeks, rose last week to 45, of which 37 occurred in Glasgow, 2 in Dundee, 2 in Aberdeen, and 2 in Paisley. The 37 deaths from whooping-cough also showed a further increase upon recent weekly numbers, and included 25 in Glasgow, 4 in Edinburgh, 4 in Dundee, and 3 in Greenock. Three of the 5 deaths from scarlet fever were returned in Glasgow, and 3 of the 7 from diphtheria in Edinburgh. The 10 deaths attributed to diarrhœa exceeded the numbers in recent weeks, and included 4 in Glasgow and 4 in Dundee. The deaths referred to the principal diseases of the respiratory organs, which had been 128 in each of the previous two weeks, rose last week to 162, and exceeded the number in the corresponding week of last year by 25. The causes of 66, or more than 10 per cent., of the deaths registered during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 25·4 and 33·4 per 1000 in the preceding two weeks, declined again to 26·7 in the week ending March 16th. During the first eleven weeks of the current quarter the death-rate in the city averaged 29·0 per 1000, the mean rate during the same period being 19·7 in London and 19·6 in Edinburgh. The 181 deaths in Dublin showed a decline of 45 from the high number in the previous week; they included 4 from "fever," 3 from measles, 2 from whooping-cough, 1 from scarlet fever, and not one from small-pox, diphtheria, or diarrhœa. Thus the deaths referred to the principal zymotic diseases, which had been 14 and 15 in the previous two weeks, declined last week to 10; they were equal to an annual rate of 1·5 per 1000, the rates from the same diseases being 2·0 in London and in Edinburgh. The deaths referred to "fever," which had been 4, 8, and 10 in the preceding three weeks, declined again last week to 4; while the fatal cases of measles, scarlet fever, and whooping-cough were almost identical with the numbers in the previous week. Three deaths from violence and 3 inquest cases were registered; and 64, or more than a third, of the deaths occurred in public institutions. The causes of 27, or nearly 15 per cent., of the deaths in the city were not certified.

THE SERVICES.

ARMY MEDICAL STAFF. — Surgeon Benjamin Allen Maturin has retired upon temporary half pay on account of ill-health (dated Jan. 29th, 1889).

BENGAL MEDICAL ESTABLISHMENT. — Surgeon-Major James Cleghorn, M.D. (dated Dec. 19th, 1888), Surgeon-Major Robert Harvey, M.D. (dated Jan. 1st, 1889), and Surgeon-Major John Bennett, M.D. (dated Jan. 13th, 1889), to be Brigade Surgeons.

MADRAS MEDICAL ESTABLISHMENT. — Surgeon-Major Charles Edwin McVittie (dated Oct. 12th, 1888), to be Brigade Surgeon.

ADMIRALTY. — The following appointments have been made: Surgeon Johnston H. Acheson, M.B., to the *Tritton*, additional, temporarily (dated April 1st, 1889); Surgeon Joseph A. Moon to the *Surprise*, and Surgeon John M'Elwee, M.D., to the *Mistletoe* (both dated March 23rd, 1889).

VOLUNTEER MEDICAL STAFF CORPS.—This corps, which will shortly be 500 strong, and which bears the same relation to the Volunteer Force that the Medical Staff Corps does to the Regular Army, will have to quit its present head quarters during the current month. The Finance Committee propose to raise £4000 by private subscription, bazaars, &c., for the purpose of acquiring new head quarters worthy of the corps in the vicinity of Charing-cross, and sufficiently large to allow of drilling men in ambulance work and storing ambulance material. The corps has on various occasions rendered services to the public—notably, on Jubilee Day, when over 500 cases of accident received proper medical attention from the company officers, who are surgeons, and were carried off the ground by the stretcher bearers. The public are earnestly asked to send subscriptions to Messrs. Holt, Laurie, and Co., Bankers, 17, Whitehall-place, London, S.W.

VOLUNTEER CORPS.—*Engineers* (Fortress and Railway Forces): 1st Aberdeenshire: James John Young Dalgarno, M.B., to be Acting Surgeon (dated March 16th, 1889).—*Rifle:* 1st Gloucestershire: Acting Surgeon J. Lidderdale resigns his appointment (dated March 16th, 1889); Wm. Monckton, Gent., to be Acting Surgeon (dated March 16th, 1889).—1st (Exeter and South Devon) Volunteer Battalion, the Devonshire Regiment: Edward Leonard Puddicombe, Gent., to be Acting Surgeon (dated March 16th, 1889).—5th Volunteer Battalion, the Durham Light Infantry: James Matthew Robson, M.B., to be Acting Surgeon (dated March 16th, 1889).—1st Wiltshire: Herbert Paget Tayler, M.B., to be Acting Surgeon (dated March 16th, 1889).

THE SANITARY INSTITUTE. — The Duchess of Albany, Patroness of the Institute, has expressed her intention of being present at the first of the course of lectures on Domestic Hygiene for Ladies, to be given on March 26th, at 3 P.M., at the Museum, Margaret-street, W.

Correspondence.

"Audi alteram partem."

THE CURABILITY OF SYPHILIS.

To the Editors of THE LANCET.

SIRS,—A few years ago the public were startled by the appearance in a non-medical quarterly journal of a vivid description of the results of hereditary syphilis. This was in itself sufficiently appalling; but now we have, in addition, an account of the various ways in which men, women, and children may innocently contract syphilis, with the additional assertion "that it is literally correct to say that we have no evidence that syphilis is, or ever has been, cured." Dr. Gowers' powerful lectures, and the manifest care he has taken in the collection of his facts, must give great weight to his opinion; and if received without explanation would, I believe, lead to very disastrous results. Dr. Gowers, indeed, has qualified his assertion in many material points, but a general assertion like this, coming from such an authority, is likely to be repeated without explanation. Such was the case with Ricord's dogma, "Once syphilitic, always syphilitic."

On such an important subject as this, which has caused a lifelong anxiety to many, it is of the first importance that the meaning of the words used should be understood. Is any disease ever "cured"? The late Dr. Wilson, of St. George's Hospital, was very particular that patients should be reported as "recovered" when they had no remaining symptoms. Again, is there any constitutional disease which may not occasionally leave some consequences or sequelæ? If not, it may be literally correct to say that we have no evidence that any disease is, or ever has been, cured. If by being cured is meant that patients after proper treatment are as free from future symptoms, have as healthy families, and live as long as others, then I firmly maintain that syphilis is as amenable to treatment as any other disease.

I may be asked what I consider proper treatment. Briefly, then, the patient should be under a mild and sustained course of mercury of from eight to twelve weeks' duration. During this time the patient's gums should be kept slightly tender; not that there is any virtue in the gums being affected beyond the evidence that it affords of the action of the medicine. In order that this action may not be interfered with, it is essential that the patient should not be exposed to cold air or cold water. Small doses of the iodide of potassium may be given to assist the action of the mercury. The necessary action cannot be maintained by mercury given internally. If continued for sufficient time and in sufficient doses it is sure to disorder the bowels, and it then has to be discontinued. When once the action of the mercury has subsided it is very difficult to renew it. A patient's system is in some sense proof against it, and there is no way of properly completing the course. All that can be done by mercury can be done by the calomel bath, which, on account of its cleanliness, is preferable to the inunction of mercury. Its action on the skin tends to develop the disease there, and it prevents salivation. It leaves the bowels unaffected, and may be continued any necessary length of time. After some experience, I deliberately assert that I cannot recall a single instance in which this treatment was in the first instance carried out where the bones or the nervous system were subsequently affected. It occurs to me constantly to see old patients who ten, fifteen, or twenty years ago were treated, and who say that neither they, their wives, nor their children have ever had any symptoms of their former disease. These cases afford as good evidence of "a cure" as can be found in the whole range of medical literature. Dr. Gowers suggests "that every syphilitic subject, for at least five years after the date of his last symptoms, should have three weeks' course of treatment twice every year, taking for that time twenty or thirty grains of iodide a day." Now, if the foregoing observations be correct, it would appear that anything like such a plan of treatment in the vast majority of instances is quite unnecessary.

Another very serious question here presents itself—namely, whether the frequent or continued administration of iodine may not do positive harm. Sir B. Brodie informed me many years ago that in his opinion a prolonged course of the iodide of potassium produced a more permanent depressing effect upon a patient's constitution than a corresponding course of mercury. This opinion I can fully endorse; but independently of the general nervous debility caused by the prolonged use of the iodide of potassium, the actual suffering produced by anxiety of mind incident to a course of treatment extending over years is often far greater than would result from the disease if allowed to run its natural course. Sir B. Brodie[1] has left on record some particulars of four cases in which the minds of patients became seriously disordered in consequence of long-continued treatment by iodine.

I am, Sirs, your obedient servant,

Savile-row, W., March 15th, 1888. HENRY LEE.

To the Editors of THE LANCET.

SIRS,—The opinion so strongly expressed by Dr. Gowers in the third of his very able Lettsomian lectures, to the effect that syphilis is incurable, appears to have caused so much surprise in the profession, and so much alarm outside it, that I venture to ask permission to say a few words on the subject.

In the first place, it will no doubt have occurred to most people that Dr. Gowers' assertion that "there is no proof of cure" is at once disposed of by the fact that second attacks of syphilis, though rare, do undoubtedly happen. But, apart from this evidence, there are passages in the lectures themselves that appear to be "not quite compatible with" a belief in the incurability of the disease. For example, on page 62 (I quote from THE LANCET) we read: "Even the diseases that are certainly consequences of syphilis are rare consequences ....." And on the next page, "It cannot be doubted ..... that ..... there must be many more who have no late symptoms whatever to reveal the disease." Then, on page 66, though we are told that "the essential element of the disease" seems beyond our reach, a few lines lower down the "disease itself" is spoken of as having "ceased to be a power for evil." Now, when a disease has ceased to be "a power for evil," surely it is not far from being cured; or, at any rate, it seems to be only a matter of words whether it is called "cured" or not. Again (page 313): "Some of you may call to mind cases ..... in which a patient was suffering from symptoms of the disease, and is known to have been afterwards free from any indication of the malady. Such cases do occur; they may be numerous." And further on in the same page: "There is the strongest reason to believe that many other cases occur in which later symptoms are altogether absent." Lastly: "There must be many more ..... who passed not merely six or ten years without anything to call the malady to notice, but who never observed, through life, any manifestation of the disease to tell them that they were or had been its subject." These extracts speak for themselves. Certainly they do not suggest a disease that is incurable in the ordinary sense of the term.

The only other point I will now refer to is that relating to the views of other writers on this matter. Dr. Gowers says: "In current works on syphilis the fact of incurability is clearly admitted." Now I do not pretend to be acquainted with all or nearly all the current works on syphilis; but of those I have read I cannot call to mind one in which syphilis is dealt with as an incurable disease. Some, at any rate, seem to indicate an exactly opposite view, judging from the following quotations.

Mr. Hutchinson[2] says that "in a large majority of cases" a course of treatment which he describes "appears adequate to the complete and permanent cure of the disease. No relapses occur, and the patient remains afterwards in excellent health." Mr. Berkeley Hill[3] says: "There is no doubt that in a large number of cases syphilis ceases permanently to be active after the first general eruption of the skin has vanished. Furthermore, in the very large majority the disease becomes exhausted when two years have elapsed from the time of infection." Also: "Experience shows that if a proper and sufficiently prolonged course of treatment have been carried out from an early period, the patient may expect to go through life with scarcely more appreciable risk than one who has never had the disease." Fournier[4] says: "When you have the disease you can cure it." Zeissl[5] says: "A cure of the disease may indeed be brought

[1] Collected Works, by Charles Hawkins, vol. iii., p. 675.

[2] Syphilis, 1887, p. 308.

[3] Syphilis and Local Contagious Disorders, 2nd ed., 1881, pp. 374-382.

[4] Syphilis and Marriage. Translated by A. Lingard. 1881, p. 13.

[5] Pathology and Treatment of Syphilis. Translated by H. Raphael. 1887, p. 173.

about in any of its stages." Dr. Keyes[6] says: "A perfect recovery is possible." Bumstead and Taylor[7] say that they fully concur with the views of Diday and Zeissl as to the self-limitation of syphilis in many cases.

It seems unnecessary to occupy further space with evidence of this kind. Enough has been given to show that syphilis is considered by some of the most competent judges to be as curable as most other diseases, and more so than many. But syphilis, even with a full expectation of recovery, is depressing enough; what would it be if Dr. Gowers' view were generally accepted? One result would certainly be that many patients would go without treatment altogether, and thus the contagious period would be greatly prolonged. As a consequence of this, the spread of syphilis would be immensely increased, and in all probability its severity also. Others, again, from a conscientious dread of causing harm to wife or children, would be afraid to marry even when by treatment they had become fit to do so, and thus the temptations to unchastity, which Dr. Gowers so earnestly deplores, would be proportionately increased.

I am, Sirs, your obedient servant,

Old Burlington-st., W., March 8th, 1889. ARTHUR COOPER.

COW-POX AND SMALL-POX.

To the Editors of THE LANCET.

SIRS,—I have read with much interest the recent correspondence in THE LANCET on the above subject, and, believing that several of the writers are very imperfectly acquainted with John Badcock's experiments, I shall feel obliged if you will kindly allow me to relate a few facts about them, which may be of interest to some of your readers.

Mr. H. H. Taylor states that my father has given no account of how he conducted his experiments. Now, my father was a patient worker and observer rather than a scientific writer, still there is a printed record of his early work, published in Brighton in 1845, entitled "A Detail of Experiments confirming the Power of Cow-pox to protect the Constitution from a subsequent Attack of Small-pox, by proving the Identity of the two Diseases. By John Badcock, Chemist, Brighton." This pamphlet is now very scarce. I have only one copy in my possession. I believe there is one in the library of the College of Surgeons of England. My father's operations were most carefully carried on for a period of twenty successive years, notwithstanding many failures, and entirely at his own expense, which was very considerable, as he kept cows for the purpose of conducting his experiments. In all, he practised on about 200 cows, several of which he inoculated repeatedly. In only twenty-three instances were satisfactory pocks considered to result. These successful cases were watched by medical men, some of whom were public and practical vaccinators, and the lymph so obtained has been circulated throughout the civilised world. My father has himself vaccinated more than 14,000 persons with this lymph, and it has been extensively used by the leading medical men in Brighton, probably more generally than any other stock, and with very satisfactory results. The late Mr. Ceely and the late Mr. Marson, old friends of my father, used it for years, and were quite satisfied of its genuineness and reliability. To show how these experiments were verified, and how very carefully and cautiously they were conducted, I cannot do better than quote from the pamphlet to which I have referred an account of my father's first inoculation of the cow in his own words: "In the month of December, 1840, I commenced operations on a fine young cow, with small-pox matter taken from a strong healthy girl, and was singularly successful. My own little boy was the first vaccinated from the cow, and from this and subsequent operations I have carefully kept up the supply of vaccine. In these proceedings the utmost caution was observed for the public safety, as well as to make the experiment interesting to the profession. Three days after inoculation with small-pox the cow was inspected by medical men, the vesicle was watched in its progress, and the lymph taken in their presence. I also placed all my early cases of vaccination under the inspection of medical practitioners; a great number of them visited my little boy during the progress of the disease. After my success in this experiment, the next was to inoculate a pony with small-pox, but without any result. I was equally unsuccessful with three cows which I inoculated with grease, for in all I failed to produce anything like a vaccine vesicle. It was not until some time after the commencement of my investigations, nor, in fact, before I had succeeded in my object, that I became acquainted with the experiments of Mr. Ceely of Aylesbury, made a few months previously, and so beautifully illustrated in the eighth volume of the Transactions of the Provincial Medical and Surgical Association."

I will now quote a short extract from a published letter of Dr. Thomas Willis, one of the eye-witnesses:—

"Old Steine, Brighton, Jan. 17th, 1841.

"SIR,—I have much pleasure in complying with your request that I should certify to the facts which have resulted from the interesting experiment you have recently made by the inoculation of a cow with variolous matter, and I have to thank you for affording me the opportunity of observing the same. On the 21st of December last I saw, in company with Mr. Burrows and yourself, the cow in question, and noticed *one* well-developed vesicle situated near the external labium, presenting the ordinary characteristics of a vaccine vesicle as it appears on the arm of a child on the eighth or ninth day of maturation, failing only in the circumjacent areola of inflammation. I understood from you that this was the eighth day from inoculation with matter taken from a small-pox patient attended by Mr. Burrows; that you had inserted the virus in two places—on the teats, and also on the spot which presented the only external result The cow did not appear to suffer from any constitutional disturbance."

Mr. H. H. Taylor states that my father's lymph has never been put to the variolous test. I must therefore again quote from my father's pamphlet an extract from a letter received from Mr. Ceely:—

"Aylesbury, June 20th, 1845.

"DEAR SIR,—I have lately had an opportunity of testing with variolous infection two children vaccinated with your last lymph, and have found them perfectly safe. In almost every case in which I have used the last supplies the patients have exhibited the primary constitutional symptoms on the sixth or seventh day, abundance of areola on the tenth day, and a full and satisfactory amount of the secondary fever, and have shown as fine vesicles as I ever wish to see. I intend to continue it."

My father, who is barely convalescent from a severe illness, still holds the opinion he has always maintained, that small-pox and cow-pox are identical—an opinion favoured by most of our leading authorities on the subject since the days of Jenner.

I remain, Sirs, yours truly,

LEWIS C. BADCOCK,

One of the Public Vaccinators for Brighton.

Brighton, March 4th, 1889.

[6] Venereal Diseases, 1880, p. 53.

[7] Pathology and Treatment of Venereal Diseases, 5th ed., 1883, p. 550.

LONDON, ANCIENT AND MODERN, FROM A MEDICAL POINT OF VIEW.

To the Editors of THE LANCET.

SIRS,—I have read with much interest and instruction the address given by Dr. Poore on the medical history of London. He begins his narrative at the time of Chaucer, who gives a description of the "Doctour of Phisik" in the "Canterbury Tales." The poet mentions the number of authors, Greek, Latin, and Arabian, from whom the "doctour" obtained his learning, and on most of these Dr. Poore offers his comments. Amongst them is the name of "Constantyn," who for special reasons has an interest for Englishmen. Constantine was a man of great celebrity, being the head of the school of Salerno, and his influence was felt throughout all Europe. Salerno had been taken by the Normans, under Robert Guiscard, at the end of the eleventh century, and this hero soon after founded what was the earliest and long the greatest medical school in Christian Europe, known as the *Schola Salernitana*. Those who have been through the town on a visit to the temples at Pæstum must have observed the Gothic church and other buildings bearing witness to Norman rule. The standard medical works had been those of Aristotle, Hippocrates, and Galen, with the Arabian writings; but now original teachers arose, the most famous amongst them being Constantine, the African, who made the school of Salerno famous throughout the civilised world. Its pupils, in order to

become physicians and surgeons, had to undergo strict examinations; the medical statutes of the place are the oldest in Europe, and form the foundation for all modern laws. At this time Robert, the eldest son of William the Conqueror, having surrendered the crown of England to his brother, went to join the Crusaders. Being wounded by an arrow at the conquest of Jerusalem, he repaired to Salerno to have the "fistula" healed. Whilst there a poem entitled "Regimen Sanitatis Salernitanum" was written especially for his benefit, and dedicated to him as King of England. Whether this was written by combined hands or by Constantine solely is not very certain. It was in Latin, and was soon translated into every European language; therefore it must have been well known to the English physicians. The translation best known at the present day appeared about the beginning of the seventeenth century, and is entitled "The Englishman's Docter or the Schoole of Salerne, or Physicall Observations for the Perfect Preserving of the Body of Man in Continuall Health." The poem gives rules for the preservation of the health and the properties of different kinds of food. It begins thus:—

"The Salerne school doth by these lines impart
All health to England's king, and doth advise
From care his head to keepe, from wrath his harte;
Drinke not much wine, sup light, and soon arise.
When meat is gone long sitting breedeth smart;
And after noone still waking keep your eies,
When mov'd you find your selfe to Nature's need
Forbeare them not, for that much danger breeds.
Use three physitians still: first doctor *Quiet*,
Next doctor *Mery-man*, and doctor *Dyet*."

The poem ends thus:—

"And ye our physicke rules that friendly read,
God grant that physicke you may never neede."

I am, Sirs, yours truly,

Grosvenor-street, W., March, 1889. SAMUEL WILKS.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Carlisle.

THE medical officer of health, in his report as to the health of the city of Carlisle for 1888, shows that 722 deaths had been registered in the Carlisle sanitary district. Of these, 378 were males and 344 females, representing a rate of 18·5 per 1000 per annum of the estimated population at the middle of the year. Twenty-five deaths had been registered of persons not belonging to the Carlisle urban district, and when these were deducted there remained a death-rate of 17·8 per 1000. The zymotic death-rate was 1·5 per 1000, against 1·9 last year. A remarkable fact was noticed as to the prevalence of scarlet fever. Not a single death had been registered from that disease during the year, and the known cases had been few. Mr. C. S. Hall, the medical officer to the Fusehill Hospital, writes a very strong letter to the Carlisle board of guardians, taking exception on behalf of the patients to a project of the corporation to set out a playground immediately adjoining the hospital, which he says contains eighty patients, of whom some are generally suffering from the most distressing and painful maladies, and who have the greatest difficulty in obtaining rest and sleep under even the most favourable circumstances. Mr. Hall pleads very powerfully for the peace and comfort of the sick and dying in this hospital, and indeed his letter shows that the proposed playground will add materially to the sufferings of the sick under his care in a way that should not be overlooked by all concerned.

Penrith.

Some matters of general interest as regards the treatment of pauper lunatics came up for consideration at the late meeting of the Penrith board of guardians. A letter from the Commissioner in Lunacy was read, stating that on his visit he found eight men and seven women entered in his visiting-book, but, so far as he could ascertain from the master, neither the certificates requisite to justify the patients' reception there, nor the power for the master to detain a patient against his will, had been given. He explained to the master the risk he ran of an action for false imprisonment, and he advised him not to be guided by what he considered best for the patient, but to act in accordance with the statutes. The Commissioner also recommended the use of tobacco for the patients, as an inexpensive luxury, which renders many patients contented. It was explained that the auditor and the Local Government Board had refused to grant tobacco, which was considered by the Visiting Committee very capricious, and it was decided to send the views of the committee on the tobacco question to London.

Sunderland.

Much satisfaction is felt in Sunderland by all interested in ambulance work at the decision of the Duncan Memorial Committee to award a sum as a grant towards the support of a school of ambulance in Sunderland. Mr. H. Shapter Robinson has received a testimonial and address from his ambulance class at the Monkwearmouth Dispensary.

Newcastle and Gateshead.

Mr. H. G. Templeton of Newcastle has fitted up a very portable and efficient adaptation of the oxyhydrogen lime-light at the Throat and Ear Hospital.—The concert given last week by the University of Durham Medical College Musical Society was appreciated by a large and fashionable audience.—It is freely stated in the papers that Mr. R. S. Newall of Gateshead has offered his magnificent telescope as a present to the University of Cambridge. Mr. Newall's instrument is well known as one of the finest in existence; it has a 25-inch aperture and a 30-feet focal length, together with motor machinery.

Newcastle-on-Tyne, March 20th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

EDINBURGH.

The Edinburgh University Court.

THE Court have decided not to sanction the carrying out of the suggestion that steps shall be immediately taken "to allow candidates for graduation in medicine to appear for examination in anatomy and physiology at the end of the second year of medical study (year of medical study meaning one winter and one summer session), subject to a provision with regard to the extent of the study of practical anatomy in such case," on the grounds that a similar experiment in regard to the subjects of the first professional examination has not been carried on long enough to admit of definite conclusions being arrived at, and that the near prospect of the whole subject of university education and graduation in Scotland being under the consideration of the Executive Commission renders it undesirable to make any alteration in the existing arrangements for the examinations for graduation in medicine. It was also resolved to recognise the examinations of the Scottish Education Department for the lower-grade "leaving certificates" as exempting, *pro tanto*, from the examinations preliminary to entrance on medical study; and the examinations for the higher grade in mathematics and natural philosophy as exempting from the said preliminary examinations in these subjects. On consideration of a minute of the Senatus, it was resolved to recognise the junior certificate of the Edinburgh University Local Examination Board as exempting from the examinations preliminary to entrance on medical study, on the understanding that the examinations for the said certificate should include (1) questions in Book III. of Euclid in addition to Book II., (2) an unprepared passage in Latin, and (3) simple sentences of English to be turned into Greek; and that the examination for the junior certificate should be brought up to the level of the lower-grade "leaving certificates" of the Scottish Education Department.

The Royal Society of Edinburgh.

The proceedings at the ordinary meeting of the Royal Society were of considerable interest to both physiologists and officers of health. The first paper was by Drs. Berry Haycraft and Harold Scofield on the Chromatology of the Bile. Starting from hæmatin obtained from hæmoglobin, it was demonstrated that by oxidation or reduction the various coloured pigments could be obtained; the action of the walls of the gall-bladder and bile-ducts, of light and electricity, in bringing about these results, was fully discussed; and it was shown by actual specimens how, by oxidation, a whole series of bile pigments could be formed, commencing at bilirubin, passing through biliverdin, blue

pigment, red pigment, and up to choletelin. In a "description of a portable apparatus for counting the dust particles in the atmosphere," Mr. John Aitken gave an account of the improvements he had made in his apparatus, by which its bulk had been reduced to a tenth of the original scale, so that it was now a portable piece of apparatus, and should prove of considerable value for determining the number of solid particles in the atmosphere. The numbers varied enormously in different places, from 500 per cub. cent. on a bright clear day in Colmonell, a small village in the south of Ayrshire, to 466,000 per cub. cent. on a wet stormy day in Glasgow near the central station. From the number of determinations made by Mr. Aitken, it is evident that his method and calculations are much simplified. Dr. G. Sims Woodhead and Mr. R. W. Gray read a paper on the Stomach of the Narwhal, and Dr. A. B. Griffiths gave the results of his researches on Micro-organisms, Part 3.

The Craiglockhart Hills.

The Edinburgh City Parochial Board has done well to retain the parks between the two hills in its own hands, to offer the West Hill to the city for a recreation ground, and to enter into negotiations with the Asylum Board for the East Hill. This arrangement is based on common sense. The East Hill is as well fitted for the erection of an asylum as for the formation of recreation grounds, and it has the additional advantage for the one over the other that it already overlooks the present Asylum property. That this arrangement will not meet with the approval of all concerned is already evident. On Monday night a meeting of citizens "favourable to the retention of these hills for the free use and enjoyment of the public for all time coming" was held, at which it was determined to report that the one hill without the other is of no value at all as a public park, and that no sale should take place to private parties, but by public roup.

The Lay Press and Surgery.

A serious gun accident which occurred to a medical student whilst out wild fowl shooting on the Forth on Saturday last is (by one of the evening papers) made the text on which to found a most gruesome article on the Surgery of the Shoulder. After describing in most minute detail the nature of the wound, "rivalling in ghastliness the severest mutilations of a military campaign," and the narrow escape ("had the lesion (*sic*) torn away only one quarter of an inch more flesh than it actually did, there would have been no option but to have excised the whole shoulder-bone") from a most serious operation, the whole of which is detailed, statistics are given, and as horrifying a picture as possible is drawn for the delectation of the medical students' friends and relatives. It is too bad that "'prentice hands" at surgery should be allowed to contribute articles which can have no good effect on the public mind, and which by their crudeness are calculated to terrify or prejudice the uneducated reader. We have certainly and necessarily sufficient of the horrible in our medical papers, and one does not care to see it run over into other channels.

Close of the Winter Session.

The winter session closes on March 22nd. The first professional examinations in medicine commence on the 25th, and the second professional examinations on April 2nd.

Edinburgh, March 19th.

GLASGOW.

House-drainage.

Mr. Honeyman, a well-known Glasgow architect, who startled sanitarians a few years ago by boldly advocating the construction of apartments with low ceilings as being more easily ventilated than lofty ones, and thus more conducive to health, has again run counter to received notions by supporting Newton's system of "full drains" as opposed to ventilated drains. This he did in a paper read recently before the Glasgow Philosophical Society, in which he held that drains as at present used could not be sufficiently ventilated, and he maintained that they should be ventilated properly or not at all. The chief point of contrast between the two systems was this: that whereas by the present system the house drain is always full of air more or less foul, by the other the drain is always full of water more or less foul; and the essential difference in result was that, while many things prejudicial to health might come out of the first drain, nothing prejudicial to health could possibly come out of the other. The latter is the more economical also, as pipes of smaller diameter could be used, and manholes and traps dispensed with. It would be necessary, however, to have an automatic flushing apparatus, or a cistern so arranged that its contents could be discharged into the drain at will.

Cremation in Scotland.

The burial scandals which excited so much indignation in Glasgow about eighteen months ago (fully noticed in these columns at the time) are bearing their natural fruit in a very marked impulse given to the subject of cremation in Scotland. They have led to the formation of a Scottish Burial Reform Society, which a good many medical men have joined, among them Professor P. A. Simpson of Glasgow University. The Society has further started a limited liability company for the erection of a crematorium in Glasgow. It is hoped that a site will be obtained free of charge in the beautiful Northern Necropolis of Glasgow, where there is some ground practically useless for purposes of interment, but well suited for the erection of a crematorium. At a meeting held to promote this company the cremated remains of a disembowelled sheep were exhibited. The carcase weighed originally 53lb. 4oz., and had been placed for a short time in an ordinary gas retort at the Traveston Gasworks; the ashes weighed 2lb. 3oz., but it was pointed out that in a crematorium the resulting ashes would be much less bulky. The cost of cremation will be from about 5*s.* to £1 or a little more.

Health Statistics.

During the fortnight ending March 9th there were 566 deaths registered in the city—a death-rate of 27·9 per 1000 living, in place of 25·7 in the previous fortnight. There were registered 541 cases of measles, 78 of whooping-cough, 48 of scarlet fever, and 28 of diphtheria; of these 108 were removed to hospital, and the remainder kept under supervision at home. The death-rate for the week ending March 16th has risen to 32, the rise being due chiefly to measles. This spread of measles is alarming; it seems to be passing from west to east over the city on the north side, and as it invades the poorer districts the mortality is rising.

A Year's Fever Work in Glasgow.

The following return, prepared by the Hospitals Committee of the Town Council, shows the number of cases treated at Belvidere hospital for infectious diseases from March 1st, 1888, to Feb. 28th, 1889:—Cases in hospital, March 1st, 1888, 382; admitted, 2808; dismissed well, 2549; died, 255; remaining in hospital, March 1st, 1889, 386; mortality per cent., 9·08.

University Volunteer Medical Staff Corps.

It has long been matter for astonishment that, while the other Scotch universities are able to maintain a company of the above corps, Glasgow University should not have attempted anything in the same direction. The reproach is now to be removed, however. At a meeting of medical students held on Thursday of last week, and presided over by Sir George H. B. Macleod, it was resolved to form a Glasgow University Company of this corps. Sir George Macleod spoke strongly in support of the movement, as did also Professors M'Kendrick and Buchanan. Dr. Beatson, who is undertaking the organisation of the company, detailed the steps which have to be taken towards raising a division of the V.M.S.C. and obtaining Government recognition for it. In this undertaking the students hope, and are certain, to obtain the sympathy and support of volunteer officers in the west of Scotland. Out of nearly 700 students there ought to be no difficulty in raising a large and efficient company.

Glasgow, March 20th.

FOOTBALL FATALITY.—Lance-corporal Evans, of the East Lancashire Regiment, died on Saturday last from the effects of an accident which occurred in a football game on the previous evening. Private Dimsdale put forward his knee to stop a ball, the deceased ran against the knee, and sustained an abdominal rupture, from which death ensued in twenty-four hours.

VACCINATION GRANT.—Mr. G. E. Phillpot, public vaccinator for the Boxmoor district of the Hemel Hempstead Union, has obtained the Government grant for efficient vaccination in his district.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

DUBLIN.

College of Physicians.

AT a recent meeting of the Fellows, Dr. Henry Bewley was elected an examiner in Physics and Chemistry under the Conjoint Scheme between the College and the Royal College of Surgeons in Ireland. Dr. Bewley succeeds Dr. W. G. Smith, who resigned the examinership some time since.

National Eye and Ear Infirmary, Dublin.

During the past year 377 in-patients were treated, besides a large number at the out-door department of the hospital. Last year the number of students on the books of the hospital was 105, and it is expected will be increased this year. It is intended to obtain the services of ladies and gentlemen in each county throughout Ireland to receive and forward subscriptions towards the expenses of the hospital.

Dublin Sanitary Association.

During the past year fifty-six new members joined the Association, which now numbers 217 members. The annual report refers to the continued existence of a large number of slaughterhouses in the city; also to the conversion of private dwellings into tenements, and to the urgent necessity that existed for promoting legislation to prevent the continuance of this system, by providing for such structural alterations as would render private dwellings suitable for the accommodation of several families. The committee consider that no residential house should be let in tenements without having been previously inspected by the sanitary authorities, and passed as suitable, and that no house should be considered suitable unless it has separate sanitary accommodation for each tenement. Unless this is done without delay, fresh areas of insanitary houses will be established, and the difficulties of dealing with the housing of the artisan classes will be increased. Sir Chas. Cameron, in proposing a vote of thanks to the outgoing president, Dr. Grimshaw, said that neither slaughterhouses nor dairy-yards should be in the city, and of the two he regarded the dairy-yard as the greater nuisance. Dr. Grimshaw, in responding, referred to the great drunkenness which prevailed in Dublin, and considered it was largely attributable to the existence of tenement houses, for homes of that class were so miserable that the people were driven from them to the public-house. The death-rate among children was very high, and an extraordinary thing to be observed in connexion with it was the number of children who died uncertified, not having been seen by medical men, and no exertion having been made to save their lives. There was another matter which was attracting a good deal of attention, and that was the way in which children were allowed to die so that insurance money might be had for them. That system was a disgrace to the whole nation, and nothing tended to increase infantile mortality more than the present state of the law on the insurance question. Good insurance companies would not take bad lives, but the poor companies did, and when the death occurred they paid some portion of the money and settled the matter. In such cases no certificates were required, and little was heard of them.

Galway County Infirmary.

The Registrar of the Infirmary has been served with a mandamus from the Court of Queen's Bench, stating that on the affidavit of Colonel O'Hara, one of the governors, the conditional order to compel the governors to elect a surgeon in the room of the late Dr. Browne will be made absolute, unless cause is shown to the contrary within ten days.

Longevity in Ireland.

Among the registered deaths during the December quarter twelve were recorded as occurring among centenarians. Of these persons, five were 100 years of age, three 102, one each at 104 and 105, and two at 107 years respectively.

Dr. Malcolm Moore, who was the only Irish candidate successful at the recent examination for the Indian Medical Service, was entertained at dinner on Saturday by the members of the Pembroke Rowing Club, previously to his departure for Netley. Dr. Moore was a well-known oarsman, belonging to the Dublin University Boat Club, and this is the first occasion that the Pembroke Club have given a club dinner to anyone not a member.

The late Dr. Black, of Ballymena, has bequeathed to the Cottage Hospital, Ballymena, a sum of £200, and his surgical instruments and medical books.

At the "commencements" at Trinity College, Dublin, a few days ago, Dr. T. Whiteside Hime was the recipient of a complimentary degree of M.D.

Dublin, March 19th.

BELFAST.

Death of the President of Queen's College, Belfast.

Queen's College, Belfast, has sustained a very severe loss in the death of its president, Dr. Porter, which occurred on the 16th inst., the cause of his demise being cerebral hæmorrhage. The late distinguished President has occupied many important positions in his highly honourable career. He was a missionary of the Irish Presbyterian Church to Palestine, and afterwards a Professor in the Assembly's College, Belfast. In 1878 he was appointed Commissioner of Intermediate Education in Ireland, and in the following year he succeeded the Rev. Dr. Henry as President of Queen's College, Belfast. During the time he has been head of the College, President Porter has enjoyed the confidence and esteem of the professors and the respect and admiration of the students, many of whom regarded him as their personal friend. He has been a senator of the Royal University since its origin, and was one of the leading members of the standing committee; and he devoted a great part of his life to the cause of education in Ireland. President Porter had an enthusiastic love for the College, of which he was principal. His able championship of its cause was evidenced in his masterly reply to Archbishop Walsh's late letter in *The Times*, to which you have recently directed attention. He took an especial interest in advancing the claims of its professors, graduates, and students, all of whom feel his loss keenly. Dr. Porter, who was a D.D. of the University of Glasgow, an LL.D. of Edinburgh, and a D.Lit. of the Queen's University, was a very distinguished literary man. On all matters relating to Palestine he was the leading authority. He wrote "Five Years in Damascus," "The Giant Cities of Bashan," and Murray's "Handbook for Syria and Palestine." He also wrote "The Life and Times of Dr. Cooke," his father-in-law. His funeral took place to-day (Tuesday), and was attended by an immense concourse of the citizens of Belfast. His remains were carried from the College to University-road by the students, who, as well as the professors, walked in procession in academic costume. Great sympathy is felt for his widow and children, four of whom are left to mourn their loss. One of his sons occupies a very high position in the Indian Civil Service, while the other is a distinguished undergraduate at Oxford.

Belfast, March 19th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Equine Origin of Tetanus.

PROFESSOR VERNEUIL believes that he has established beyond doubt the equino-telluric origin of tetanus. When in 1885 he propounded the hypothesis of the equine origin of tetanus, it was unfavourably received; but now, in France and elsewhere, it has many adherents. In a communication recently made by him to the Academy of Medicine, he recalled that many human maladies originate from the lower animals, as, for instance, charbon, rabies, and glanders. It is therefore not impossible that tetanus may come from the horse. Moreover, tetanus may affect other animals, such as the ox, sheep, monkeys, parrots, rabbits, &c. It is possible that at times man contracts tetanus through one of these animals, but in the greatest number of cases it would be through the horse. The contagion is sometimes direct, sometimes mediate or indirect. M. Verneuil cites a number of examples of these different modes of contagion. For instance, a coachman dies from tetanus five days after the death of his horse, a groom two days after that of his mule. A man is seized with tetanus; he sleeps in a stable where there were tetanic horses. An officer falls from his horse; he is wounded in the finger by the hoof of the animal, and he becomes affected with tetanus; five months previously two horses died from

tetanus in his stable. Bites and wounds caused by horses often produce tetanus; whereas bites of dogs or wolves do not have this effect. Blows with a whip in the eye cause as many cases of tetanus as all the operations practised on the eyes. Many cases of tetanus are traceable to instruments, harness, carriages, &c. In South America, where horses feed in extensive prairies enclosed by rails, if a person is wounded by a splinter in rubbing against these rails he may become liable to tetanus. Finally, it appears that the emanations alone from dungheaps have sufficed to cause the malady. M. Verneuil maintains that tetanus is caused by a bacillus, which might preserve for a long time a latent life ready to develop as soon as it meets with a suitable soil.

Anthropological Researches.

In his inaugural thesis, Dr. Étienne Rollet, of Lyons, described the measurement of the long bones of the limbs in relation to anthropology, and also from a clinical and medico-legal point of view. The results deduced from measurements made by the author himself of more than 1500 long bones, and executed according to procedures of mathematical precision, refer particularly to the determination of the height according to the length of the bones of the limbs. According to Dr. Rollet, "for men of tall stature all the bones of the upper and lower extremities are proportionally shorter than the corresponding bones in short persons; whereas in the case of women the inferior extremity is longer and the superior extremity shorter. So, also, in men of small stature the limbs are proportionally longer than in tall men; and in women the inferior extremity is shorter, but the superior extremity is longer." M. Manouvrier, curator at the Anthropological Society of Paris, in reviewing Dr. Rollet's work, found that it contained certain errors involving conclusions contrary to those of previous works. M. Manouvrier obtained some interesting results, which he related in two communications to the Anthropological Society. In the first place, he showed that the inferior extremity is, on an average, longer, relatively to the stature, in tall individuals than in short ones, contrary to a conclusion of Dr. Rollet; and that women are comparable, on an average, on this point, to very short men. Dr. Rollet's error, he says, proceeds—(1) from the formation of too many subdivisions, whereby the general character is lost among individual variations; (2) in the inclusion of a great number of old men in these groups, in whom the proportions of the body are no longer normal. But notwithstanding these few defects, M. Manouvrier did not fail to insist on the great merit of Dr. Rollet's researches.

Vaccination and Revaccination.

At the Academy of Medicine Dr. Hervieux lately stated that revaccination is as useful as vaccination. The latter, he said, tends to lessen the frequency and the intensity of small-pox epidemics, and the former to make them disappear completely. Revaccination should be practised every ten years; but in the case of a threatened epidemic, revaccination should be performed immediately, even when but a short time has elapsed since the last operation. Human vaccine or that from the heifer may be employed indifferently. It is only by the adoption of this important measure that small-pox has been almost completely stamped out of Germany.

Deaths from Hydrophobia.

A man named E. Rey, of Oissel, who was bitten by a rabid dog on Dec. 13th, 1888, and treated at the Pasteur Institute from Dec. 17th to Jan. 6th, 1889, is reported by the *Semaine Médicale* to have died from hydrophobia on March 4th. With reference to the death from this disease of a young girl as reported in my last, Dr. Gérin Roze has since brought to the notice of the Société Médicale des Hôpitaux that another child, bitten by the same dog and also treated at the Pasteur Institute, is up to this date doing well.

The Anglo-American Medical Society.

A meeting of the English and American physicians practising in Paris was held on Thursday last, to organise the Anglo-American Medical Society, referred to in THE LANCET of Feb. 9th. The first general meeting is fixed for Monday, Sept. 30th, 1889, in Paris, when over 100 are expected to attend. A dinner at one of the hotels is part of the programme, and some of the prominent New York and London physicians are expected to be present, while distinguished members of the Paris Faculty will be invited. The following physicians were present at this preliminary meeting:—Dr. Barnard, Dr. Boggs, Dr. Bull, Dr. Chapman, Dr. Darcus, Dr. E. Dupuy, Dr. Faure-Miller, Dr. Nachtel, Dr. the Hon. Alan Herbert, Dr. Warren-Bey, Dr. Webb, Dr. Jennings, Dr. Sinn, Dr. Loughnan, and Dr. Murray.

Paris, March 20th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Professor Virchow and Homœopathy.

ON the 14th ult., Professor Virchow wrote to the *Deutsch. Med. Wochensch.* as follows: "In December, 1888, a letter of thanks from a patient to a homœopathist was published in a local paper, ascribing to the latter the cure of a severe disease of the larynx which had been recognised by Berlin specialists and by me as cancer. This letter of thanks has been circulated far and wide, especially in the provincial press, and has induced several physicians to address questions to me and letters, with the request that I would enlighten the public by communicating the real facts of the case. In view of this public and professional interest in the matter, I think it right to make the following statement. It is true that the patient, a man of sixty-eight, was examined with the larnygoscope by Professor Krause's assistant, Dr. Friedländer, on Dec. 7th, 1887, in Professor Krause's absence, and found to be suffering from cancer in the larynx. The growth, as far as it was visible, was removed by Dr. Friedländer through the mouth next day, and brought to me for microscopic examination. I confirmed the diagnosis. A recent examination of the still existing remnants of the growth yielded the same result. I am credibly informed that the patient did not consent to the partial extirpation of the larynx which was proposed to him, but went home and wrote to a homœopathist, who, without ever seeing him before or after, sent him his advice and remedies by post. The patient was re-examined by Dr. Krause a few days ago, Dr. Friedländer being ill. Dr. Krause ascertained that no cure has taken place. Though at this moment—that is, more than fourteen months after the endo-laryngeal extirpation of the growth—the patient suffers no pain or obstruction except lasting hoarseness, the examination with the laryngoscope showed that the disease remains unchanged."

Professor Leyden.

Ernst Leyden, Professor of Clinical Medicine in Berlin University, celebrates the twenty-fifth anniversary of his becoming a university teacher to-day. He began his career in that capacity as a private professor here, but received a call to a chair at Königsberg in 1865. From there he went to Strasburg in 1872 as one of the professors in the new university there, and returned to Berlin in 1876 as head of the Children's Hospital. At Königsberg he, with Recklinghausen and Spiegelberg, initiated a new era in clinical instruction, and at Strasburg he shared with his present Berlin colleagues, Waldeyer and Gusserow, the labour of remoulding the medical department of the university on the German model. On the death of Frerichs, Leyden became head physician in the Charité. His writings are as follows: "Observations on Poisoning by Phosphorus," 1861; "Grey Degeneration of the Posterior Columns of the Spinal Cord," 1863; "Acute Poisoning by Phosphorus," 1865; "The Pathology of Jaundice," 1866; "Clinical History and Treatment of Diseases of the Spinal Cord," in three volumes, 1874-1876; and studies on Diseases of the Lungs, on Bright's Disease, and on Over-exertion of the Heart.

A New Hospital for Epileptic Patients.

The municipality of Berlin intends to create a new establishment for 700 epileptic patients, capable of being so enlarged as to receive 1000, at Bissdorf, a village near the city. It is to have a farm and ample grounds attached to it, and is to consist of a central building and many cottages scattered over the grounds, each with a garden round it. The whole will cost 4,730,000 marks (about £236,500).

Professor Möller of the Veterinary College here returned from St. Petersburg last Monday. He went thither some time ago at the Czar's wish, to give a series of lectures in the Veterinary Institute there, and especially to demonstrate the larynx operations on horses invented by him. He was treated with the greatest cordiality by men of science in the Russian capital.

Berlin, March 20th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Medical Education in the United States.

THE fifth report of the Illinois State Board of Health on Medical Education has just been issued. It was prepared by Dr. John H. Rauch, its indefatigable secretary. The report is full of information in regard to the present status of the medical schools of the country, and shows the progress of medical education. The last report appeared in 1886. The number of medical colleges at that date was 117; it is now 118, an increase of one. The number of extinct institutions at the former date was 120; it is now 130, a decrease of 10. The total number of colleges for women is 6; for coloured students, 2; for both white and coloured students, 1; for both sexes, 38. The total number of matriculants for the session 1887–88 was 12,579, and the total number of graduates 3813. The percentage of graduates to matriculants was 30·3. There has been a gratifying increase in the organised methods of teaching hygiene and medical jurisprudence, as proved by the following facts: In 1880, 42 colleges had chairs of hygiene, and 61 had chairs of medical jurisprudence; in 1889 there were 117 of the former and 112 of the latter. Since 1886 there has been an increase of colleges for women by 1, while the number of colleges for both sexes has decreased by 3. The percentage of graduates to matriculants has steadily diminished from an aggregate average of 36·3 per cent. in 1881–82 to 30·3 per cent. in 1887–88. The percentage of graduates to matriculants in the different schools in 1887–88 was as follows: Regular, 29·6; homœopathic, 35·3; eclectic, 32·9; physio-medical, 36·5; miscellaneous, 45·4. The percentage of graduates to matriculants in individual schools varies markedly, being for 1887–88 from 6·6 to 52·1. The largest percentage of graduates of all schools in the States is 45·4 for Indiana; the smallest, 8·0 for North Carolina. The average duration of lecture terms has increased since the report of 1886. The number of schools having terms of five months and more is now 115, against 110 in 1886–87. The number having six months and more is now 66, against 63 in 1887–88, and 55 in 1886–87. The number of colleges exacting certain educational requirements has increased from 114 in 1886 to 117 in 1887, against 45 in 1880. In 1880 the number of colleges requiring attendance on three or more courses of lectures was 22; in 1886, 41; in 1889, 47.

Standard of Educational Qualification improving.

The standard of numerous requirements fixed by the Illinois State Board, qualifying a person to practise in that State, is advancing. The present schedule requires a preliminary examination as to general education, which colleges do not all enforce; qualification in the usual branches of a medical education, including gynæcology, hygiene, and medical jurisprudence; the sessions of the school granting the diploma must be at least five months; regular examination of each student at least twice each week; attendance upon clinical and hospital instruction during two terms; three full years of study. The college must show a sufficient and competent corps of instructors, and necessary facilities for teaching dissections, clinics, &c. In 1886 the Board decided that the continuous graduation of 45 per cent. of the total number of matriculants of a medical college must be accepted as *primâ-facie* evidence that, practically, every candidate is graduated without regard to competency or qualification. It determined, therefore, that no medical college be recognised as in good standing the aggregate graduates of which amount to 45 per cent. of the aggregate matriculants during any period of five years prior to the session 1886. In 1887 the Board advanced another step. It determined to define a medical college as in good standing whose graduates can practise in that State, and which shall after the sessions of 1890-91 require four years of professional study and three regular courses of lectures as conditions of graduation.

Influence of the Action of the Illinois State Board on Medical Education.

The power of this single Board over the medical colleges is surprising. The Board practically dictates to the schools the standard of educational qualification which they shall establish and enforce. When the Board first began to sift the profession of that State and fixed its standard, the colleges regarded its interference with their unquestioned prerogatives with contempt. But when the schools found their graduates debarred from practice in the great State of Illinois by the action of the Board, sustained by the Courts, they at once ceased opposition and arranged their courses of study accordingly. Now the schools follow implicitly the regulations of the State Board, and the result is that the standard of medical education is advancing year by year, under the leadership of this intelligent Board of Health.

New York, March 4th.

REFORM AT THE ROYAL COLLEGE OF SURGEONS.

WE are asked to state that, in addition to the amount already guaranteed, Dr. Ralph Gooding has promised £10 10*s.*, J. Mc Kellar, M.D., Deputy Surgeon-General, £5 5*s.*, and Mr. W. G. Dickinson £5 5*s.* The following sums have also been received since last announcement. Of course, the cost of proceedings is likely to be considerable, and should not be allowed to fall on the pockets of a few, when the advantages contemplated would be derived by the whole body of Members of the College.

J. Tweedy	£10	10	
Sir Morell Mackenzie	10	10	
J. A. Rigby...	1	1	
E. Adam	1	0	
P. W. Fraser, R.N. ...	1	0	
B. Ninnis, M.D., R.N., Dep. Insp.-Gen. ...	1	1	
O. E. B. Marsh	£1	1	
G. W. Richard	1	1	
G. H. Batterbury, M.D.	2	2	
H. W. Kiallmark ...	1	1	
T. Smailes	1	1	

Obituary.

WESTON PEEL DAVIS, M.D.PARIS, L.R.C.P.L., &c.

WE have to regret the loss of a very promising young physician in Dr. Weston Davis. Educated at St. George's Hospital, where he held the posts of senior house surgeon and assistant surgical registrar, and was Brodie prizeman in surgery, after obtaining the London qualifications, he went to Paris and pursued his studies in the university there. After assiduously attending the many Paris hospital cliniques, especially those of Dr. Charcot, he graduated as an M.D. in 1887, obtaining first-class honours in most of the subjects; while his graduation thesis, "On the Treatment of Diphtheria by Antiseptic Injections into the Larynx," attracted the attention of many celebrated foreign surgeons and physicians. Dr. Davis invented a highly ingenious instrument to carry out the idea advocated in his thesis, and in several cases, when, by the courtesy of his elder colleagues, beds were placed at his disposal, he was able to demonstrate to these gentlemen the advantages of his invention. He was also one of the earliest gentlemen to obtain the certificate in Hygiene granted by the Royal College of Physicians. During the brief period that he practised in Paris, he was physician to his Excellency the British Ambassador. Dr. Davis succumbed to typhoid fever after an illness lasting three weeks. All the symptoms were abating, and the temperature coming steadily down, when a severe and repeated hæmorrhage from the bowel produced a state of collapse from which he never rallied. He was only twenty-eight years of age. This painfully sudden death will come as a severe shock to the many old St. George's friends of the deceased.

GLASGOW UNIVERSITY COURT.—At a meeting of the Court held this week, present all the members except the Lord Rector and Dr. Cochran Patrick, the following gentlemen were appointed Examiners in Medicine:—W. D. Halliburton, M.D., B.Sc., M.R.C.P. (London), with special reference to Physiology; David Newman, M.D., F.F.P.S. (Glasgow), with special reference to Pathology; George A. Gibson, M.D., D.Sc. (Edinburgh), with special reference to Medicine and Clinical Medicine; William Jas. Fleming, M.D. (Glasgow), with special reference to Surgery and Clinical Surgery. The term of office is in each case four years.

Medical News.

UNIVERSITY OF OXFORD.—The following degree was conferred in a congregation held on the 14th inst.:—

D. Med.—Francis D. Crowdy, Oriel.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 14th inst. the following degrees were conferred:—

Bachelor of Medicine and Bachelors of Surgery.—Frederick Parkes Weber, Trinity; Arthur Babington Blaikie, James Walter Hawkins, Gonville and Caius; Alfred Earnshaw Hewer, non-collegiate.
Bachelor of Medicine.—Vickerman Hennell Rutherford, Sidney Sussex.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.—At the March examinations the following obtained the licences in Medicine and Surgery:—

Medicine.—George Arthur Fox.
Midwifery.—George Arthur Fox, John Patrick Henry.

EPSOM COLLEGE.—The Rev. Thomas N. Hart Smith, M.A., Exeter College, Oxford, assistant master at Marlborough College, has been elected head master of Epsom College.

YELLOW FEVER is reported to be raging severely at Rio, an average of fifteen deaths occurring per day. During the passage of the *Atrato* from Rio to Buenos Ayres two of her passengers succumbed to the disease.

CHILDREN'S HOSPITAL, BRISTOL.—The annual report for the past year of this institution is satisfactory, both in respect to the good work done and its financial position. It is now free from debt. During the year 632 patients were admitted, 425 were discharged well, and 138 improved. The deaths were 34, or at the rate of 5·46 per cent.

BURTON-ON-THE-WATER COTTAGE HOSPITAL.—The annual report for 1888 of this institution (the third village hospital established in England) records the committee's satisfaction at the continued prosperity of the hospital. Of the 40 in-patients during the year 21 left cured, 3 incurable, 11 relieved, 1 died, and 4 remained. The committee ask for a continuance of the support afforded hitherto.

PRESENTATIONS.—Mr. G. R. E. Bonsall, F.R.C.P., L.R.C.S. Edin., on the occasion of his removing from Beckley, Kent, has been presented by the inhabitants, as a mark of their esteem, with a beautiful illuminated farewell address, a handsome clock, with ornaments *en suite*, and a purse of money.—Mr. W. W. Webber, M.R.C.S., was on Friday, March 15th, presented by the members of the Crewkerne ambulance classes, with a handsome marble timepiece in recognition of his services as lecturer.

GENERAL HOSPITAL, SUFFOLK.—From the annual report for the past year, it appears that the total income amounted to £4008. Comparing the expenditure of 1888 with the previous year, there is a decrease of £368, mainly attributable to careful management and supervision. The in-patients had increased by fifty-one. It was stated that the invested funds of the hospital represented a value of upwards of £40,000, and the interest was £1400 per annum.

HASTINGS, ST. LEONARDS, AND EAST SUSSEX HOSPITAL.—On the 12th instant the annual meeting was held at the hospital. In reviewing the first complete year after entering upon the new building the committee refer to the large amount of relief afforded to the sick poor, and to the generous support accorded to the hospital. The number of patients admitted during the year was 2639, and there had been over 500 extra out-patients. The income and expenditure showed a balance in favour of the institution of £1214 17*s.* 1*d.*

FOOTBALL.—*Inter-Hospital Challenge Cup (Rugby)*: The final tie in this competition was decided at Richmond on Wednesday last, when the holders, St. Thomas's, easily defeated Middlesex, scoring 13 goals and 6 tries to 1 try.—*United Hospitals Association Cup*: The final tie between St. Bartholomew's and Guy's was played on the County Cricket Ground at Leyton on Wednesday last. The game was pretty even during the first half, during which period St. Bartholomew's scored 1 goal. After crossing over they added 3 more points, and won by 4 to *nil*.

PRINCESS ALICE MEMORIAL HOSPITAL, EASTBOURNE.—This Hospital was reopened on Saturday last, after an extensive enlargement. The new wings have been erected by public subscriptions, but to cover the outlay incurred further contributions are required.

ASSOCIATION OF CERTIFYING SURGEONS.—The Home Secretary will receive the deputation from this Association on Monday next at 12.30 P.M. It is proposed that the deputation shall meet in the Hôtel Métropole at 10.30 A.M., to make final arrangements before interviewing Mr. Matthews.

THE DRAINAGE OF MARGATE.—The inquiry into this question was resumed before Mr. Arnold Taylor, the Local Government Board Inspector, at the Town Hall, Margate. The opponents of the sea-drainage scheme promoted by the corporation mustered in strong force, and contended that whatever might be the necessities of town drainage it was a mistake for a watering-place dependent on the attractions of sea and air to pollute the sea and foul the air by a system of sea drainage. Mr. Taylor said he would make his report on the whole matter to the Local Government Board, and it would be for the department to decide.

LITERARY INTELLIGENCE.—The first number has just appeared of a new "Internationalis Centralblatt," edited by Dr. W. Zuelzer of Berlin, in association with well-known representatives in various parts of the world. The subject of the new journal is "de Physiologie und Pathologie der Harn- und Sexual-Organe," and in character it resembles the Centralblatt für Laryngologie. The number contains articles by Professor von Krafft-Eling of Graz, Professor Bozzolo of Turin, Dr. Ge'za von Antal of Buda-Pesth, Professor W. Prayer of Berlin, and Dr. C. Benda, as well as a full report of recent progress in Genito-urinary Pathology in England and America, by Mr. Hurry Fenwick of London.—The editorship of the *Breslauer Aerztliche Zeitschrift*, vacated by the sudden death of Professor Gscheidlen, has been, temporarily at least, undertaken by Drs. Leppmann and Partsch.

MEDICAL NOTES IN PARLIAMENT.

The Dublin Barracks Question.

In the House of Commons, on the 14th inst., Captain Selwyn asked whether it was true that the General Prisons Board of Ireland had recently closed the Richmond Prison owing to the amount of sickness amongst the prisoners, and that nevertheless a detachment of the Queen's Regiment, now quartered in the Royal Barracks, Dublin, was being moved this week into the same unhealthy building.—Mr. Brodrick, Financial Secretary to the War Office, replied that he could not answer for the sanitary condition of the Richmond Prison while under the Prisons Board; but since it has been occupied by troops the Irish military authorities report that they have been very healthy.

Factory Inspection in Waterford.

On the 15th inst., in reply to Mr. R. Power, Mr. Matthews said: The inspector of the district has visited the factories and workshops in Waterford seven times in the last three years. No special report has been made on the condition of the working classes there.

Armed Burglars and Flogging.

Mr. Matthews, in reply to Admiral Field, said he had received a presentment made by the Hampshire grand jury, with the approval of Mr. Justice Hawkins, advocating the infliction of corporal punishment on armed burglars, as also on persons convicted of brutal violence towards women and children. Whilst the infliction of corporal punishment was contrary to the spirit of recent legislation, he (Mr. Matthews) thought there might be cases of exceptionally brutal violence where corporal punishment would have a useful effect. He would consult with the Lord Chancellor as to whether any amendment of the existing law is desirable or necessary.

Irish Prison Surgeons.

On the 18th, the Solicitor-General for Ireland, replying to Mr. McNeill, said that the writer of a recent article, complaining that Irish prison surgeons were made the scapegoats for the acts of the Government whenever those acts created uproar or involved adverse criticism, was under a misapprehension, as in no case had the prison surgeons been made the scapegoats for the acts of the Government.

Dr. Barr and The Times.

Sir W. Harcourt again introduced the subject of Dr. Barr, and being dissatisfied with the replies given by Mr. A. J. Balfour and Mr. Matthews, announced his intention of moving for the correspondence which had taken place between the Home Secretary and Dr. Barr, and would, furthermore, on the vote for the salary of the medical officers of the Home Department, call attention to the conduct in this matter of the Home Office.

On the 20th, Sir W. Harcourt again raised the question of the Home Secretary's connexion with prison administration, especially in regard to the medical department. He also referred to the action of Mr. A. J. Balfour in regard to the publication of Dr. Barr's letter in *The Times*.—Mr. Matthews, in defending Dr. Barr, pointed out that although he broke the letter of the law in publishing the communication,

he revealed nothing that was not publicly known beforehand. Mr. Matthews agreed that the publication of the letter would disqualify Dr. Barr for service as a medical officer in an Irish prison, but he did not see that it would be a disqualification for his duties at Liverpool, which he had hitherto discharged with satisfaction to others and signal credit to himself.—Mr. A. J. Balfour failed to see any grave objection to his having forwarded Dr. Barr's letter to *The Times*, and entered an emphatic protest against this attempt to defame a public officer under the pretence of a regard for the public service.

Hospitals and Local Rates.

On the 19th, Sir J. Goldsmid brought in a Bill, which was read a first time, "to exempt charities and hospitals from local rates."

Pensions and Medical Certificates.

In Committee of Supply on the Supplementary Estimates, on the vote of £9500 for superannuation and retiring allowances, Sir G. Campbell said he should like to have an assurance that officials were not allowed to retire on certificates of private medical men, and that pensions were not granted except upon the report of a responsible officer of the Government.—Mr. Jackson replied that the Bill of the Chancellor of the Exchequer would deal with that matter, and provide for the necessity of a confirmatory medical certificate from an officer of the department in which the applicant had served or of an examination by a Government medical officer.—Sir J. Swinburne thought it would be preferable that there should in every case be a personal examination by the Government officer.—The Chancellor of the Exchequer said this fact was quite recognised, and a personal examination would be the general rule; but owing to circumstances of the district or otherwise it might not always be possible, and provision would be made for such cases.—The vote was then agreed to.

Pauper Lunatics.

On the supplementary vote of £7000 for pauper lunatics in England and Wales, Dr. Tanner said that while the number of lunatics was decreasing the number chargeable was increasing, the increase in the last year being 1602. He further complained that lunatics were not properly cared for, and instanced the case of a man who died two days after arrival at Colney Hatch, having a broken jaw and other injuries which accelerated his death. As a medical man he considered it his duty to press the matter.—Mr. W. Long, Secretary to the Local Government Board, explained that his department had no control over the administration of these institutions. Any complaints should be addressed to the Lunacy Commissioners. Whilst there was doubtless some foundation for charges brought forward in various cases, as a whole those institutions were very carefully looked after. He felt sure that the remarks of the hon. member would receive attention in the proper quarter.—The vote was agreed to.

The Army Medical Committee.

On the 21st, Dr. Farquharson asked the Secretary for War when the Committee of Inquiry on the Army Medical Department would begin its labours.—Mr. Stanhope, in reply, said that a preliminary meeting of the Committee was held to-day, and Lord Camperdown was the chairman of it. Questioned as to whether any medical officers connected with the service were members of the Committee, the right hon. gentleman replied that he thought it would be far better that they should not be, but that instead they should give evidence. Scotland was not specially represented on the Committee.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.
Hints to Midwives on certain duties connected with Pregnancy and Labour. By H. Macnaughton Jones, M.D., M.Ch., F.R.C.S.I. and E. pp. 46.
A Guide to the Examinations by the Conjoint Examining Board in England; and for the Diploma of Fellow of the Royal College of Surgeons. By Frederick J. Gant, F.R.C.S. Sixth Edition. 1889. pp. 336.

BLACKIE & SON, 49, Old Bailey, London, E.C.
Blackie's Modern Cyclopedia of Universal Information. A Handy Book of Reference on all Subjects and for all Readers. With Pictorial Illustrations and a series of Maps. Edited by Chas. Annandale, M.A., LL.D. Vol. I. 1889. pp. 512. Price 6*s*.

BLAKISTON, SON, & CO., Philadelphia.
Transactions of the American Surgical Association. Vol. VI. Edited by J. Ewing Mears, M.D. 1888. pp. 572.

CASSELL & COMPANY, LIMITED, London.
Elements of Histology. By E. Klein, M.D., F.R.S. Illustrated with 194 Engravings. New and enlarged edition. 1889. pp. 368.

CHAPMAN & HALL, London.
Mechanics and Experimental Science as required for the Matriculation Examination of the University of London. By Edward Aveling, D.Sc. Vol. I.: Heat and Light. Vol. II.: Magnetism and Electricity. 1889. pp. 196 and 147.

CHURCHILL, J. & A., New Burlington-street, London, W.
St. Thomas's Hospital Reports. New Series. Edited by Dr. Gulliver and Mr. Clutton. Vol. XVII. 1889. pp. 427.
The Bronchi and Pulmonary Bloodvessels, their Anatomy and Nomenclature; with a Criticism of Professor Aeby's Views on the Bronchial Tree of Mammalia and of Man. By William Ewart, M.D. Cantab., F.R.C.P. 1889. pp. 232.
Papers on Dermatology. By E. D. Mapother, M.D. 1889. pp. 104.

HIRSCHWALD, AUGUST, Berlin.
Leitfaden für Operationsübungen am Cadaver und deren Verwerthung Beim Lebenden Menschen. Von Dr. E. Gurlt. Siebente verbesserte Auflage. 1889. pp. 195.
Lehrbuch der Klinischen Untersuchungs-Methoden für die Brust- und Unterleibs-Organe; mit Einschluss der Laryngoskopie. Von Dr. Paul Guttmann. Siebente vielfach verbesserte und vermehrte Auflage. 1889. pp. 506.

LONGMANS, GREEN, & CO., Paternoster-row, London.
"The Truth against the World." The Land of my Fathers. By T. Marchant Williams. 1889. pp. 227. Price 2*s*. 6*d*.
Puddings and Pastry à la Mode. By Mrs. De Salis. 1889. pp. 70. Price 1*s*. 6*d*.
Cakes and Confections à la Mode. By Mrs. De Salis. 1889. pp. 61. Price 1*s*. 6*d*.
A Handbook of Cryptogamic Botany. By A. W. Bennett, M.A., B.Sc., F.L.S., and George Murray, F.L.S. With 378 Illustrations. 1889. pp. 473. Price 16*s*.
Notes on Physiology. By Henry Ashby, M.D. Lond., M.R.C.P. Fifth Edition. Illustrated. 1889. pp. 362. Price 5*s*.

MACMILLAN & CO., London and New York.
A Text-book of Pathology, Systematic and Practical. By D. J. Hamilton, M.B., F.R.C.S.E. Copiously Illustrated. Vol. I. 1889. pp. 736.

PUBLISHED BY THE OBSTETRICAL SOCIETY OF LONDON, 54, Berners-street, W.
Transactions of the Obstetrical Society of London. Vol. XXX., for the year 1888. Part 4 for October, November, and December. Edited by Percy Boulton, M.D., Senior Secretary, and F. H. Champneys, M.D. 1889. Price 5*s*.

REEVES, WILLIAM, 185, Fleet-street, London.
Looking Backward, 2000—1887. By Edward Bellamy. Seventeenth Edition. pp. 249. Price 1*s*.

RENSHAW, HENRY, 356, Strand, London.
Renshaw's Students' Essentials:—Essentials of Physiology; by H. A. Hare, M.D. Essentials of Medical Chemistry; by Laurence Wolff, M.D. Essentials of Surgery; by Edward Martin, A.M., M.D. Essentials of Pathology and Morbid Anatomy; by Armand Semple, M.B., M.R.C.P. Lond. Essentials of Obstetrics; by W. Easterly Ashton, M.D. Essentials of Anatomy; by C. B. Nancrede, M.D. 1889.

SELL'S ADVERTISING AGENCY, 167, Fleet-street, London.
Sell's Directory of Registered Telegraphic Addresses, combined with Sell's Telegraphic Code. 1889. pp. 524.

SMITH, ELDER, & CO., Waterloo-place, London.
Surgical Operations. Part II.: Amputations, Excision of Joints, Operations on Nerves. By Sir William Mac Cormac. 1889. pp. 490.

SPOTTISWOODE & CO., Gracechurch-street, London, E.C.
Minutes of the General Medical Council, of its Executive and Dental Committees, and of its Three Branch Councils, for the year 1888. With Four Appendices. Vol. XXV. 1889.

STEINHEIL, G., Paris.
Bulletins de la Société Anatomique de Paris. 63e Année, 1888, 5me Série. Tome XI. Rédigés par MM. Marfan et Toupet, Secrétaires. 1888. pp. 1056.
Traitement des Cystites douloureuses. Par Dr. J. M. Lavaux. 1889. pp. 146.

SWAN SONNENSCHEIN & CO., Paternoster-square, London, E.C.
Jenner and Vaccination: A Strange Chapter of Medical History. By Chas. Creighton, M.D. 1889. pp. 300.

THACKER & CO., 87, Newgate-street, London.
A Text-book of Medical Jurisprudence for India. By J. B. Lyon, F.C.S., F.I.C. Revised as to the legal matter, by J. D. Inverarity, Barrister-at-Law. 1889. pp. 557.

TRÜBNER & CO., Ludgate-hill, London.
Irresponsibility and its Recognition. By a Graduate of Oxford. 1889. pp. 95.

WHITING & CO., Sardinia-street, Lincoln's-inn-fields, London.
The Powers of the London County Council in regard to the Housing of the Working Classes. By Wm. Chance, Barrister-at-Law. 1889. pp. 62.

WILKINSON BROS., Union-street, Bath.
Valvular Disease of the Heart, with special reference to Treatment by the Bath Waters. By Hugh Lane, M.R.C.S. Eng. 1889. pp. 35. Price 1*s*.

WRIGHT, JOHN, & CO., Bristol; HAMILTON, ADAMS, & CO., Paternoster-row, London.
Lectures on Bright's Disease. By Robert Saundby, M.D. Edin. With 50 Illustrations. 1889. pp. 290.

Ueber das Fibrinferment und seine Beziehungen zum Organismus; ein Beitrag zur Lehre von der Blutgerinnung, mit besonderer Berücksichtigung der Therapie; von Dr. Med. George Bonne (George Hertz, Würzburg, 1889).—Report on Medical Education, Medical Colleges, and the Regulation of the Practice of Medicine in the United States and Canada, 1765–1889; by J. H. Rauch, M.D., Secretary, Illinois State Board of Health (H. W. Rokker, Springfield, Illinois, 1889).—Transactions of the American Dermatological Association at its Twelfth Annual Meeting, held September, 1888, in connexion with the First Meeting of the Congress of American Physicians and Surgeons; by the Secretary (Boston, 1888).—Ueber die Hypothese einer Vererbung von Verletzungen Vortrag gehalten am 20 September, 1888, auf der Naturforscher-Versammlung zu Köln; von Dr. August Weismann (Gustav Fischer, Jena, 1889).—Daphne's Daring, a Love Story; by Mrs. A. Phillips (Joseph Hughes, London, 1889), price 1*s*.—Transactions of the American Ophthalmological Society, twenty-fourth annual meeting, New London, Conn., 1888 (published by the Society, Hartford).—The Investor's Ledger, with a few Hints on keeping it (Effingham Wilson & Co., London, 1889), price 1*s*. 6*d*. net.—Subacute Progressive Polymyositis; by Geo. W. Jacoby, M.D. (J. Rooney & Co., New York, 1888).—The Cure of Consumption, being the Evidence laid before Professor Verneuil's Committee, by G. W. Hambleton (Spottiswoode & Co., London, 1889).—Handbuch der Physiologischen Optik;

von H. von Helmholtz. Zweite umgearbeitete Auflage, mit zahlreichen in den Text eingedruckten Holzschnitten. Fünfte Lieferung (Leopold Voss, Hamburg und Leipzig, 1889).—De l'Hémiplégie dans quelques Affections Nerveuses; par Blanche A. Edwards (Paris, 1889).—Newbery's Catalogue of Medicines, Perfumery, Mineral Waters, Druggists' Sundries, &c., 1889. The Ninth Annual Issue. (Newbery & Sons, London).—Who's Who in 1889? Forty-first year (Hamilton, Adams, & Co., London).—Internationales Centralblatt für Physiologie und Pathologie der Harn- und Sexual-Organe. Von M. Zuelzer. Band I., Heft 1 (Leopold Voss, Hamburg und Leipzig, 1889).—The Warehousemen and Drapers' Trade Journal. Spring Number. March 16th, 1889 (W. H. & L. Collingridge, London).—The Comparative Merits of Tracheotomy and Intubation in the Treatment of Croup; by George W. Gay, M.D. (Cupples & Hurd, Boston, 1888).

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ALDRED, J. CHAS., L.K.Q.C.P., L.M.Irel., L.F.P.S.Glasg., has been appointed Medical Officer of the Dore and Totley No. 6 Districts, Derbyshire Union. Also Medical Officer of Health for Eccleseli Bierlow Rural Districts.

AULD, ARCHD., M.B., C.M. Glas., has been appointed Medical Officer for the Third Division of the Pontefract Union. Also Surgeon for the West Riding Constabulary, Snaith; Medical Officer for the Hensall and Whitby Bridge Clubs, and Lecturer for the St. John Ambulance Association, vice Dr. Geo. Fernley Atkinson, Snaith, Yorks.

BARFORD, A. M., L.R.C.P. Lond., M.R.C.S., late Assistant House Surgeon, has been appointed House Physician to the Liverpool Northern Hospital, vice W. Milligan, M.B., C.M. Aberd., resigned.

BENNET, C. JOHN, M.R.C.S., has been reappointed Medical Officer of Health for the Hayfield and Chapel-en-le-Frith Unions and Fairfield Local Board.

BROOKE, H. A. G., B.A., M.B. Lond., M.R.C.S., has been appointed the first Lecturer on Skin Diseases, Owens College, Manchester.

BROSTER, A. E., L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer of Health for Wirksworth Union District.

BUNCLE, ALEX., M.B., C.M. Edin. and Lond., has been reappointed Medical Officer of Health of Pontefract and Featherstone Union Districts.

CAMERON, JAMES, M.B., has been appointed Medical Assistant to the Dundee Royal Asylum, vice James Watson, M.B., C.M., resigned.

CARTER, R. J., M.R.C.S., L.S.A., has been appointed House Surgeon to the Male Lock Hospital, Dean-street, W., vice John Lynes, M.R.C.S., L.S.A., resigned.

CHEESEWRIGHT, J. F., L.R.C.P., L.M. Edin., M.R.C.S., has been reappointed Medical Officer of Greasborough Union District.

CHURCHILL, J. F., L.R.C.P. Lond., M.R.C.S., L.S.A., has been reappointed Medical Officer and Public Vaccinator, First Chesham District, Amersham Union.

DANIELS, C., B.A., M.B. Cantab., has been appointed Resident Medical Officer to Queen Charlotte's Lying-in Hospital.

DONALDSON, W., L.K.Q.C.P., L.M., L.R.C.S. Irel., has been appointed Medical Officer for the Third District, Bromley Union, Kent.

DOWKER, F. W., M.R.C.S., L.M., L.S.A., has been reappointed Medical Officer of Health for Oswaldkirk District, Helmsley Union.

ELLISTON, G. S., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health, Ipswich Borough and Port, Samford and Bosmere and Clayton Rural Districts.

ERSKINE, ROBERT, M.D. Qu. Univ., Irel., M.Ch., L.M., has been reappointed Medical Officer of Health, Camborne District, Redruth Union.

HOFFMEISTER, WM., M.D. Heidelb., L.R.C.P. Lond., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Union Districts, West and East Cowes, Isle of Wight.

JAQUET, JOHN LEWIS, M.D., M.R.C.S., has been appointed Surgeon to the First District of the St. Saviour's Union, Surrey, vice H. Willson, resigned.

JOHNSTONE, THOMAS, M.D., M.B., C.M. Edin., M.R.C.P. Lond., has been reappointed Medical Officer of Health, Ilkley.

JONES, E. W. T., has been reappointed Analyst for the Borough of Wolverhampton.

KIDD, H. A., M.R.C.S., L.R.C.P., has been appointed Junior Assistant Medical Officer to the Surrey County Asylum, Cane Hill, vice G. C. Fitzgerald, promoted.

LARKING, A. E., M.D. Dur., M.R.C.S., L.S.A., has been appointed Medical Officer of the Second Chesham District, Amersham Union.

MONCKTON, WM., M.R.C.S., L.M., has been appointed Medical Officer of the Portishead District, Bedminster Union.

ODHAMS, G. F., M.B., C.M. Edin., has been appointed Medical Officer of Health, Seventh District, and Workhouse, Norwich Union.

SCOTT, R. A., L.R.C.P. & S.E., has been appointed Medical Officer and Public Vaccinator for the Allerston District of the Pickering Union.

SHAPLEY, FRANK, M.R.C.S., L.S.A., has been appointed Medical Officer for the Seventh District, Bromley Union, Kent.

STEEN, WM. C., M.D., M.Ch., M.A.O., has been appointed Medical Officer and Public Vaccinator for the West Butterwick Division of the Gainsboro' Union.

WARREN, EDWIN CHARLES, L.R.C.S. Edin., L.S.A., has been appointed Medical Officer of Health of Gillingham, Kent.

WASHBOURN, J. WYCHENFORD, M.D. Lond., M.R.C.P. Lond., has been appointed Assistant Physician to the London Fever Hospital. Also Demonstrator of Bacteriology to Guy's Hospital.

WATSON, THOMAS ALFRED, M.B. Edin., has been appointed District Medical Officer to the Bishopwearmouth East District, and Public Vaccinator to the Sunderland and Bishopwearmouth East Districts of the Sunderland Union.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BEDFORD GENERAL INFIRMARY.—Honorary Surgeon Dentist.

BRADFORD INFIRMARY AND DISPENSARY.—Dispensary Surgeon. Salary £100 per annum, with board.

CITY DISPENSARY, 46, Watling-street, London, E.C.—Physician.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months.

FISHERTON ASYLUM, Salisbury.—Assistant Medical Officer. Salary £100 per annum, with board, lodging, and washing.

GENERAL HOSPITAL, Birmingham.—Assistant House Surgeon for six months. No salary, but residence, board, and washing provided.

HOSPITAL FOR INFECTIOUS DISEASES, Bootle-cum-Linacre.—Resident Medical Officer. Salary £100 per annum, with board, washing, and apartments at the hospital.

KILBURN, MAIDA VALE, AND ST. JOHN'S WOOD GENERAL DISPENSARY. Honorary Medical Officer.

LIVERPOOL INFIRMARY FOR CHILDREN.—Assistant House Surgeon for six months. No salary, but board and lodging will be provided.

NEWPORT AND COUNTY INFIRMARY AND DISPENSARY, Newport, Mon.—House Surgeon. Salary £100 per annum, with board and residence (no stimulants).

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, E.—Surgeon.

NORTH-WEST LONDON HOSPITAL, Kentish-town-road.—Senior Resident Medical Officer.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone, N.W.—Physician to Out-patients.

ROYAL BERKS HOSPITAL, Reading.—Assistant House Surgeon, for six months. Board and lodging provided.

ROYAL SOUTHERN HOSPITAL, Liverpool. — Junior House Surgeon. Salary sixty guineas per annum, with board, residence, and washing.

SALFORD ROYAL HOSPITAL.—Junior House Surgeon. Salary £50 per annum, with residence and maintenance.

SCARBOROUGH FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary £200 for the first year, £220 for the second, if satisfactory, with fees extra and bonus, and residence free of rates and taxes, coal, and gas.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Junior Assistant House Surgeon. Salary £50, with board, lodging, and washing.

SURREY DISPENSARY, Great Dover-street, Southwark.—Dispenser. Salary £120 per annum, without residence.

TOWNSHIP OF MANCHESTER.—Assistant Medical Officer at the Workhouse at Crumpsall, near Manchester, and Resident Assistant Medical Officer at the Workhouse in New Bridge-street, at a joint salary of £150 per annum, with furnished apartments, fire, light, washing, and attendance.

WALLASEY DISPENSARY.—House Surgeon. Salary £120 per annum, with furnished residence, coal, and gas.

WESTERN GENERAL DISPENSARY, Marylebone-road, N.W. — Junior House Surgeon.

Births, Marriages, and Deaths.

BIRTHS.

DUKE.—On the 17th inst., at Windmill House, Clapham-common, S.W., the wife of Surgeon-Major Joshua Duke, of a daughter.

JOYNT.—On the 17th inst., at Sandgate, Kent, the wife of Surgeon-Major H. W. Joynt, Army Medical Staff, of a daughter.

PAUL.—On the 14th inst., at 38, Rodney-street, Liverpool, the wife of F. T. Paul, F.R.C.S., of a daughter.

MARRIAGES.

HEASMAN—PAWLE.—On the 13th inst., at Christ Church, Lancaster-gate, William Gratwicke Heasman, M.R.C.S., L.R.C.P. Lond., eldest son of Alfred Heasman, of Courtwick, Littlehampton, to Helen Margaret, younger daughter of F. C. Pawle, J.P., of Northcote, Reigate.

ROBERTS—FINCH.—On the 20th inst., at St. Barnabas' Church, Linslade, Bucks, by the Rev. C. D. Blakiston, M.A., Vicar, assisted by the Rev. C. J. Gibson, M.A., Sidney Morton Pearson Roberts, M.A., M.B., B.C. Christ's Coll. Camb., M.R.C.S. Eng., son of J. Shearwood Roberts, M.D., Sheffield, to Louisa Kate, only child of Henry Finch, Esq., of The Gables, Linslade, and Bloomsbury-square, London.

DEATHS.

BOTHAMLEY.—On the 14th inst., at his residence, Bromley, Kent, Richard Broughton Bothamley, M.R.C.S., in his 38th year.

BOUTFLOWER.—On the 19th inst., at Great Ducie-street, Manchester, John Boutflower, F.R.C.S., aged 92.

CARTER.—On the 18th inst., at Francis-road, Edgbaston, John Carter, M.R.C.S., aged 81.

CROWDY.—On the 14th inst., at St. John's, Newfoundland, Charles Crowdy, Surgeon.

DAVIS.—On the 15th inst., at Ludlow House, Ampthill-square, Willoughby Davis, M.R.C.S., aged 60.

KEALL.—On the 17th inst., at Nelson Lodge, Bedminster, Bristol, William Powell Keall, L.R.C.P. Edin., M.R.C.S., L.S.A. Eng.

MACKENZIE.—On the 11th inst., at Glasgow, the result of an accident, John Mackenzie, M.D., of Tighnabruaich.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, March 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5 P.M. Prof. Charles Stewart: The Integumentary System in Plants and Animals.
SOCIETY OF ARTS.—8 P.M. Mr. C. V. Boys: Instruments for the Measurement of Radiant Heat. (Cantor Lecture.)
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Richard Davy and Mr. Golding Bird: Excision of the Scaphoid Bone in Confirmed Flat-foot.—*Dr.* Sidney Phillips: On a case of Syphilitic Fever resembling Tertian Ague.

Tuesday, March 26.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. G. J. Romanes: Before and after Darwin.
ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Tooth: Secondary Degenerations of the Spinal Cord. (Goulstonian Lecture.)
SOCIETY OF ARTS.—8 P.M. Mr. Robert Pritchett: Borneo.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. T. J. Walker (communicated by Sir Andrew Clark): On the Clinical Significance of Colourless or Clay-coloured Stools unaccompanied by Jaundice, and their Connexion with Disease of the Pancreas; and on the part played by the Pancreas in Eliminating Bile from the Intestines.—Mr. W. Arbuthnot Lane: The Causation and Pathology of the more commonly observed Forms of Lateral Curvature of the Spinal Column.

Wednesday, March 27.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M. Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical visits on Wednesday and Saturday at 9.15 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5 P.M. Prof. Charles Stewart: The Integumentary System in Plants and Animals.
HUNTERIAN SOCIETY.—8 P.M. Pathological Evening. Dr. Carpenter: Hydronephrosis.—Dr. Fowler: (1) Specimens of Laryngeal Phthisis; (2) On Cervix Uteri.—Dr. Hingston Fox: Tubercular Ulceration of the Ileum.—Dr. Port: Aneurysm of the Heart.—Mr. Cotman: Carcinoma of the Stomach. Specimens by Dr. Pitt and other Fellows.
SOCIETY OF ARTS.—8 P.M. Adjourned Discussion on Prof. Kennedy's paper on the Objects and Methods of the Society of Arts' Motor Trials.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Adjourned Discussion on the Use and Abuse of Massage. Dr. Routh: On a case in which Erotic Symptoms preceded Epilepsy, and its Medico-legal Importance. Specimens by Mr. Lawson Tait, Dr. Bantock, and Dr. R. T. Smith.

Thursday, March 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. J. Henry Middleton: Houses and their Decoration from the Classical to the Mediæval Period.
ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Tooth: Secondary Degenerations of the Spinal Cord. (Goulstonian Lecture.)
THE SANITARY INSTITUTE.—5 P.M. Prof. W. H. Corfield: House Sanitation from a Householder's Point of View.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. Harrison Cripps: Inguinal and Lumbar Colotomy. Messrs. Samuel Benton, Swinford Edwards, Herbert Allingham, and C. B. Balls will show cases and take part in the discussion.

Friday, March 29.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5 P.M. Prof. Charles Stewart: The Integumentary System in Plants and Animals.
SOCIETY OF ARTS.—8 P.M. Sir Juland Danvers: The Progress of the Railways and Trade of India.
ROYAL INSTITUTION.—9 P.M. Mr. A. Gordon Salamon: Yeast.

Saturday, March 30.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Rt. Hon. Lord Rayleigh: Experimental Optics (Polarisation; Wave Theory).

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 21st, 1889.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Mar. 15	30·56	N.E.	37	34	65	41	33	..	Cloudy
,, 16	30·49	W.	36	33	60	52	31	..	Overcast
,, 17	30·21	S.W.	47	45	67	54	35	..	Cloudy
,, 18	29·97	S.W.	45	43	62	50	42	..	Overcast
,, 19	29·41	W.	45	43	88	55	41	..	Cloudy
,, 20	29·02	W.	47	43	83	52	41	·12	Cloudy
,, 21	29·26	N.E.	41	40	..	38	40	.23	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

THE RED CROSS IN FRANCE.

W. F.—In France the Society for the Relief of the Wounded in War dates from 1864, but it led a latent existence till 1869. Before this latter year the need for it was not anticipated. "When war comes," it was said, "the relief of the wounded will not fail." But the saying was but partially justified by the event. Its first president was the Duc de Fesensac. He was succeeded by General de Goyon, who died suddenly in 1869. After him came the Comte de Flavigny, but he was cut off by cholera in 1873. The next president was the Duc de Nemours, whose energy and tact put the Society on a most satisfactory footing; and when he resigned his place was filled by Marshal Macmahon, whose great experience and sagacity have developed the Duc de Nemours' efficient work. When the war broke out in 1870, the organisation was put to the severest strain, chiefly from the precipitation with which every movement was made. An eloquent and touching account of its services is given by M. Maxime du Camp.

Mons. P. V. Lamey.—The subject is satisfactorily dealt with in Martindale's "Coca, Cocaine and its Salts," published by H. K. Lewis, 136, Gower-street, W.C.

Victimised.—It is scarcely necessary to say that the company mentioned has never received recognition by us, much less approval.

Mr. J. A. Fleming.—To both questions the reply is in the affirmative.

THE ENGLISH CONJOINT EXAMINATION.

To the Editors of THE LANCET.

SIRS,—I beg to bring under notice the manner in which the Colleges of Physicians and Surgeons of London conduct their business and abide by their regulations. Under special regulations it says: "Any candidate who shall have passed before the 1st of October, 1884, at either of the two Colleges, the First or Second Examination, or the First and Second Examinations, will be exempt from the equivalent examinations of the Examining Board." Now, this is not the case, as gentlemen holding the L.R.C.P. Lond. are not exempt from re-examination in anatomy and physiology, the subjects of the said second examinations, when presenting themselves either for the M.R.C.S. alone or M.R.C.S. and L.R.C.P. combined. Perhaps one of the secretaries of the Colleges will explain to whom this special regulation applies? I am an L.R.C.P. Lond., answering all the requirements mentioned, yet I am prohibited from taking advantage of these "special regulations" without any explanation. As there are many situated like myself, who would like to obtain a surgical degree without the trouble of going back to the dissecting-room to work up practical anatomy again, it would only be justice to allow us to have the benefit of this regulation. May I solicit the influence of some member of the Board to "inquire within"?

I am, Sirs, yours truly,

March 15th, 1889. L.R.C.P. LOND.

"MEDICAL ETIQUETTE."

To the Editors of THE LANCET.

SIRS,—As I am the practitioner referred to in your issue of March 9th, under the above heading, I trust you will allow me, in justice to myself, to lay the facts of the case before you.

I had been in constant attendance for four or five days. On making my visit on Sunday morning, Feb. 24th, I was informed by the wife that she had despatched a messenger to Mr. N. Hannah the previous night with the request that he would meet me in consultation. She informed me that Mr. Hannah said he had a cold, and was unable to come. The person sent to make the arrangement, on receiving this information, returned home without acquainting me. In about a couple of hours afterwards I was told Mr. Hannah made the visit complained of. Smarting under a supposed wrong, I wrote the letter published on my return home. Expecting that he would write to me, explaining the circumstances attending his visit, I delayed posting the letter until after the night post on Monday, the 27th. Perhaps you will kindly say whether it was or was not incumbent on him to make such an explanation. The letter was, as you state, "written under a misapprehension of the facts of the case." I am satisfied now that Mr. Hannah was totally unaware of my attending at the time, and I do not impute any dishonourable motive. I have the profoundest regard for the etiquette of the profession, and am as anxious to maintain it as Mr. Hannah himself. I enclose you a letter received from him, which I think you will agree with me was not written in the most pleasant humour. I admit the letter I wrote was hasty, but had he written, as I cannot help thinking he ought to have done, it would have avoided this unpleasantness, which I regret has arisen. I trust, however, it will not disturb the harmonious feeling previously existing.

I am, Sirs, yours faithfully,
Ashton-in-Makerfield, March 13th, 1889. WM. LATHAM.

*** We gladly insert Mr. Latham's letter confirming our view that he wrote under misapprehension. Mr. Hannah cannot be said to have visited the patient, for he declined all professional service on finding that the patient was under the care of another medical man. His explanations were really due to the patient's friends, and were given, though, we repeat, it is to be regretted that the consultation desired did not take place. We feel sure that Mr. Latham will entirely acquit Mr. Hannah of blame as regards himself.—ED. L.

Rev. H. B. Chapman.—Surely, so small a sum could be raised without the publication of a general appeal.

Dr. Thomas Barr.—The announcement could only appear as an advertisement.

SHAKSPEARE AS A CLINICIAN.

To the Editors of THE LANCET.

SIRS,—Following upon the remarks in an annotation in your last issue upon the description of Falstaff's death-bed, may I be allowed to direct the attention of your readers to another example of Shakspeare's excellent clinical accuracy? It occurs in "Timon of Athens," Act iv., Scene 3. Timon is addressing the two courtesans, Phrynia and Timandra.

I am, Sirs, obediently yours,
March 13th, 1889. A. J. G.

"Consumptions sow
In hollow bones of man; strike their sharp shins,
And mar men's spurring. Crack the lawyer's voice
That he may never more false title plead,
Nor sound his quillets shrilly: hoar the flamen
That scolds against the quality of flesh,
And not believes himself; down with the nose,
Down with it flat; take the bridge quite away
Of him, that his particular to foresee,
Smells from the general weal: make curl'd-pate ruffians bald;
And let the unscarr'd braggarts of the war
Derive some pain from you: plague all:
That your activity may defeat and quell
The source of all erection."

J. M. A. (University of Glasgow).—We may refer our correspondent to the report by a Committee of the Royal Medical and Chirurgical Society on Suspended Animation, contained in the 45th vol. (1862) of the Society's Transactions, and to the Code of Directions published by the Royal Humane Society.

M.D.—We do not understand the reply to advocate the use of the title "Dr." by an L.S.A., but to state that he cannot legally be prevented from so doing.

CRANIOTOMY.

To the Editors of THE LANCET.

SIRS,—In reply to your correspondent, "L. D.," in THE LANCET of March 9th, will you allow me, in answer to Question 1, to refer him to pages 523, 555, and 587 of Leishman's Midwifery, 3rd edition, and also to Barnes' Operations.—Question 2: No post-mortem examination was made.—Question 3: Antiseptics were used. Immediately after the placenta was extruded I gave an injection of hot water with permanganate of potash in solution, the cavity of the uterus being syringed. This injection was repeated twice daily by the midwife, who acted as nurse, until the morning of the day on which death occurred. I may say in conclusion that the case occurred in a most squalid house, and possibly the insanitary and poor surroundings may have had a great deal to do with the fatal result.—I remain, Sirs, yours faithfully,
March, 1889. HARRY EUGENE HACKETT.

THE SHEERNESS MEDICAL SOCIETY AND ITS ESTIMATE OF MEDICAL MEN AND THEIR SERVICES.

To the Editors of THE LANCET.

SIRS,—Will you allow me for the solace of the 114 unsuccessful candidates for the appointment of medical officer to the Sheerness Medical Society to state a few facts regarding that Society. There are 4200 members, and have been over 5000, and it is expected that an efficient medical man would soon increase the membership, even above the latter figure. The doctor is required to take a house selected for him at £40 per annum, exclusive of rates; he must provide light and firing, fit up the surgery, and supply the "best advice, medicines, leeches, bandages, dressings, and splints, and whatever may be required for the proper treatment of disease or hurt." I cannot say whether nurses, stimulants, beef-tea, &c., are included among the necessaries which this doctor must supply. He is certainly allowed private practice, but who will pay a doctor 2*s.* 6*d.* for one visit when he can have the best of everything the same gentleman can supply for 2*s.* 2*d.* a year. Should the committee at any time think his private practice interferes with their medical officer's duties to the members, they can give him one month's notice, at the end of which time he must pack up and leave the neighbourhood and his private practice. Another interesting condition is that should the medical officer not be found by a member requiring attendance, the doctor being absent on any business or pleasure not connected with the Society—i.e., seeing a private patient,—then the member can forthwith call in another practitioner, and the unfortunate medical officer of the Society must pay the bill. Should the committee consider that their doctor has too much to do, they will employ a dispenser or a qualified assistant, as they think proper; the salary of the former to be £70 per annum, that of the latter £130. But mark, the medical officer is not altogether out of it in the employment of his assistant, for he will have the pleasure of paying his (the assistant's) salary out of his own income. Again, should the members be dissatisfied with medicines supplied, the committee can set aside 6*d.* per year per member out of the medical officer's salary, and the committee will purchase the drugs.

As a warning to gentlemen who may be among the selected for similar appointments, let me say I was summoned by telegram to attend the election next day without getting any further particulars than was contained in the attractive words "£300 per annum and private practice.' I, with several others, went to Sheerness from distances varying from fifty to 200 miles. When we got there we had to hunt for the committee meeting, and were then kept waiting in a comfortless room for two hours. Upon being summoned before the committee I was informed that there were 115 candidates, some of whom had offered a premium to be appointed. The following were among the questions asked the selected candidate, which are not so much to be wondered at when we remember they came from men who value their medical man at 1*s.* 8*d.* per annum, medicine excluded?—1. Were you ever a bankrupt? 2. Is your wife a lady? 3. Can you bring your furniture here free of debt? &c. There seems to me a nobility about a fourpenny or sixpenny dispensary after such an experience as this.

I am, Sirs, yours faithfully,
March 13th, 1889. NEMO.

J. B.—Anthropology, which has asserted its right to a place in scientific medicine, has quite a literature of its own, the chief results of which will be found conveniently summarised in the "Bibliothèque Anthropologique," edited by MM. Mathias Duval, Georges Hervé, Abel Hovelacque, Ch. Letourneau, Gabriel de Mortillet, and H. Thulié. It is published by Lecrosnier et Babé of Paris, and has already reached its eighth volume. Six more volumes are announced as in the press, among them Manouvrier on Human Craniology and Bordier on Comparative Pathology.

Justitia.—Whilst very far from having any desire to under-estimate the value of our correspondent's act of humanity, we still think that the authorities are in a better position than we can be to decide as to the propriety of the bestowing or withholding the award.

Mr. De'ath (Buckingham).—Our opinion is quite in accord with that o our correspondent.

ANTIPYRIN *v.* QUININE.

To the Editors of THE LANCET.

SIRS,—Sir George Taubman Goldie, in your issue of Feb. 23rd, writes to ascertain whether antipyrin or quinine is the more effective in the treatment of malarial diseases. I would call his attention through the medium of your columns to a letter of mine that appeared in THE LANCET of April 10th, 1886. I believe that I was the first to call the attention of the profession to the efficacy of antipyrin in the remittent forms of malarial disease. After a somewhat extended trial of different remedies, when in charge of the police hospital in Bombay, I came to the conclusion that in the intermittent forms where there is a marked remission of febrile symptoms quinine in large doses is the most efficacious remedy, while in the more common forms, where there is but a slight remission, we have in the exhibition of antipyrin a potent remedy. My usual method of administration was to give fifteen grains of antipyrin in syrup of ginger every hour until the temperature became normal; then prevent any subsequent rise by the free administration of quinine. It is as an aid to, and not as a substitute for, quinine that I advocate the use of antipyrin. I have no experience of the prophylactic powers of antipyrin.

I am, Sirs, yours faithfully,
Cullompton, Devon, March 12th, 1889. JOHN HOPE POTTER.

ERRORS IN THE MEDICAL REGISTER.

To the Editors of THE LANCET.

SIRS,—I wish to give a word of advice to those members of the profession who, like myself, registered one qualification and then additional ones during following years, to see that their names, *with additional qualifications*, appear in the annual Register. I registered one qualification in 1885, and an additional one in August, 1887. To this day no such additional entry appears in it. No, not even in this year's, of which I have seen the proof sheets. To me it seems extraordinary that when such a publication as Churchill's Directory is so complete that the official Register should be so faulty. One might make allowances if the time of the Council was taken up in putting down that growing curse, unqualified assistants. The members of the Council are not those who are affected by such "Chinese cheap labour," and so we poor general practitioners have to put up with low fees or no fees. If the Council is of any use, then it ought to do its work properly, and not plead "printer's error" when an omission is pointed out to them. One can understand such an error creeping in one year, but not for two years.

I am, Sirs, your obedient servant,

March 6th, 1889. M.R.C.S., L.R.C.P.

*** Should any error in the Medical Register be noticed, the best and most natural thing to do would surely be to send information thereof at once and direct to the Registrar of the Medical Council, who would no doubt immediately rectify it. No officials are infallible; but we are assured that great pains are taken in regard to the publication in the printed Register of all additional qualifications registered by practitioners. However, we understand it frequently happens that complaint is made in regard to the non-appearance of some particular qualification when, in point of fact, it has never been duly registered, but only perhaps mentioned in a letter or on an inquiry form as held or possessed by the practitioner.—ED. L.

A Junior.—Mr. Styrap's book would probably answer the purpose.

Mr. C. J. Symonds.—The paper will be inserted very shortly.

"POISONING FROM A LOCAL APPLICATION USED FOR TOOTH EXTRACTION."

To the Editors of THE LANCET.

SIRS,—In an annotation in THE LANCET of Dec. 8th, 1888, under the above heading, it is stated: "As far as we can ascertain, no case of rash following the use of cocaine has been brought forward." Will you permit me to state a case which occurred in my practice. In April or May, 1887, I admitted a child into Clunes District Hospital, Victoria, for what cause has now escaped my memory. There was a sebaceous cyst over the left eyebrow, which the mother wished removed before the child left the hospital. A few days before she left I removed the cyst, having first injected five minims of a 10 per cent. solution of cocaine. In the evening my attention was drawn to the child by the house steward, Mr. M'Dowall, as being restless and feverish. I found the child as described, with a temperature of 105°. Thinking that the rise in temperature was caused by the cocaine injection, as I had frequently seen unpleasant symptoms reported in THE LANCET arising from the use of cocaine, I left instructions for the child to be watched. The following morning I found the body covered with the rash of urticaria, and the temperature normal. Through the day the rash disappeared, and the child went away without any further trouble. I know of no cause but the cocaine which could have produced the rash. I had used cocaine hypodermically frequently before this, and do so still for minor operations, in strength varying from 5 to 20 per cent., without experiencing any inconvenience from its use. I have mentioned the matter to several of my medical friends, but have not heard of a similar case. I am, Sirs, yours faithfully,

J. W. PERCEVAL,
Late Medical Officer, Clunes District Hospital.

Mount Bischoff Hospital, Waratah, Tasmania, Feb. 5th, 1889.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

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Englishman (Calcutta), West London Observer, Hertfordshire Mercury, Herald and Weekly Free Press, South Eastern Advertiser, West Coast Times (Hokitika, New Zealand), Reading Mercury, Work, Surrey Advertiser, Mining Journal, Warehousemen and Drapers' Trade Journal, &c., have been received.

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